6/8/01

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SEARCH REQUEST FORM

RECEIVED

Requestor's Name: Rebecca Cook 2D01 MAR - 7 Serial Number: 09/867285

Date: 3/7/02 Phone: 308-4724 Art Unit: 1614

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

INV Frank Pipers

1) Please search method of using proton pump (genus) inhibitor to prevent gastric ulcers.

& 2) Specific inhibitors of Claims 8 & 9.

3) Search Claim 20.

Thanks
Rebecca

STAFF USE ONLY

Point of Contact:
Alexandra Waclawiw
Technical Info. Specialist
CM1 6A02 Tel: 308-4495

Date completed:
Searcher:
Terminal time:
Elapsed time:
CPU time:
Total time:
Number of Searches:
Number of Databases:

P.U. 3-14

Search Site
- ____ STIC
- ✓ CM-1
- ____ Pre-S

Type of Search
- ____ N.A. Sequence
- ____ A.A. Sequence
- ____ Structure
- ____ Bibliographic

Vendors
- ____ IG Suite
- ✓ STN
- ____ Dialog
- ____ APS
- ____ Geninfo
- ____ SDC
- ____ DARC/Questel
- ____ Other

PTO-1590 (9-90)

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=> d his

     (FILE 'HCAPLUS' ENTERED AT 10:16:05 ON 14 MAR 2002)
               DEL HIS Y

     FILE 'REGISTRY' ENTERED AT 10:18:06 ON 14 MAR 2002
               ACT COOK/A
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L1             STR
L2          1709 SEA FILE=REGISTRY SSS FUL L1
              ---------
               ACT COOK3/A
              ---------
L3   (         1)SEA FILE=REGISTRY ABB=ON  OMEPRAZOLE/CN
L4   (         1)SEA FILE=REGISTRY ABB=ON  LANSOPRAZOLE/CN
L5   (         1)SEA FILE=REGISTRY ABB=ON  PANTOPRAZOLE/CN
L6   (         1)SEA FILE=REGISTRY ABB=ON  "E 3810"/CN
L7   (         1)SEA FILE=REGISTRY ABB=ON  LEMINOPRAZOLE/CN
L8   (         2)SEA FILE=REGISTRY ABB=ON  "S 4216"/CN
L9             7 SEA FILE=REGISTRY ABB=ON  (L3 OR L4 OR L5 OR L6 OR L7 OR L8)
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               ACT COOK2/A
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L10  (        54)SEA FILE=REGISTRY ABB=ON  (73590-58-6 OR 103577-45-3 OR 1-2625-
L11           64 SEA FILE=REGISTRY ABB=ON  L10 OR 102625-70-7/CRN
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     FILE 'HCAPLUS' ENTERED AT 10:18:19 ON 14 MAR 2002
L12         2663 S L9 OR L11
L13         5829 S ANTIULCER?
L14        16093 S ULCER#
L15          562 S L12 AND L13
L16          619 S L14 AND L12
L17          840 S L15 OR L16
L18         2220 S PROTON (L) PUMP?
L19         4874 S (PROTON (L) PUMP? )/AB
L20         5752 S L18 OR L19
L21          243 S L20 AND L17
L22          140 S L18 AND L17
L23          629 S L18  (L) INHIBIT?
L24          139 S L22 AND L23
L25        53985 S (OXYGEN (L) CONSUMP?  OR FATIGUE?)
L26            1 S L24 AND L25
L27         3981 S PHYSI? (L) PERFORM?
L28            1 S L27 AND L24
L29        68634 S (OXYGEN (5A) CONSUMP?  OR FATIGUE?)/AB
L30         4251 S (PHYSI? (5A) PERFORM?)/AB
L31        72801 S L29 OR L30
L32            1 S L24 AND L31
L33            1 S L26 OR L28 OR L32
L34        58079 S DRUG (L) DELIVER? (L) SYSTEM?
L35           18 S L34 AND L24
L36       567092 S OXYGEN?/AB OR OXYGEN?
L37            2 S L24 AND L36
L38       701613 S HUMAN OR HORSE OR DOG
L39            7 S L24 AND L38
L40           11 S L33 OR LL35 OR L37 OR L39
L41           24 S L33 OR L35 OR L37 OR L39
L42           19 S L24 AND 63/SX,SC
L43            6 S L42 NOT L41
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=> fil reg
FILE 'REGISTRY' ENTERED AT 10:28:25 ON 14 MAR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES:   12 MAR 2002  HIGHEST RN 400707-37-1
DICTIONARY FILE UPDATES:  12 MAR 2002  HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between
12/27/01 and 1/23/02.  Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved.  Also, note that searches
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies.  Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> d que stat l2
L1                STR
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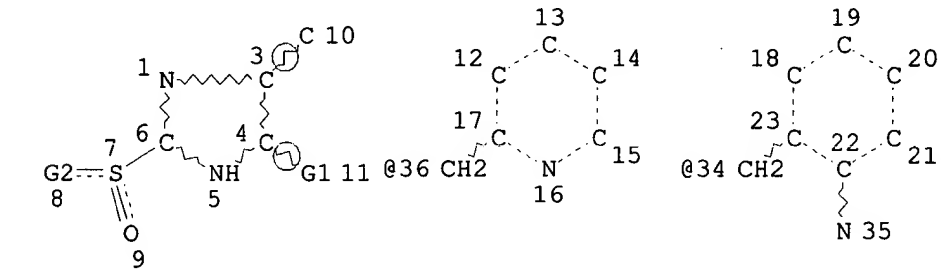

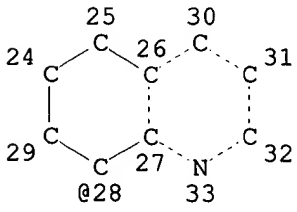

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VAR G2=36/34/28
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  35

STEREO ATTRIBUTES: NONE
L2          1709 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED   2687 ITERATIONS                    1709 ANSWERS
SEARCH TIME: 00.00.01



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L3   (          1)SEA FILE=REGISTRY ABB=ON  OMEPRAZOLE/CN
L4   (          1)SEA FILE=REGISTRY ABB=ON  LANSOPRAZOLE/CN
L5   (          1)SEA FILE=REGISTRY ABB=ON  PANTOPRAZOLE/CN
L6   (          1)SEA FILE=REGISTRY ABB=ON  "E 3810"/CN
L7   (          1)SEA FILE=REGISTRY ABB=ON  LEMINOPRAZOLE/CN
L8   (          2)SEA FILE=REGISTRY ABB=ON  "S 4216"/CN
L9              7 SEA FILE=REGISTRY ABB=ON  (L3 OR L4 OR L5 OR L6 OR L7 OR L8)


=> d 19 1-7

L9   ANSWER 1 OF 7  REGISTRY  COPYRIGHT 2002 ACS
RN   117976-90-6  REGISTRY
CN   1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-
     pyridinyl]methyl]sulfinyl]-, sodium salt (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   E 3810
CN   LY 307640 sodium
CN   Pariprazole
CN   Rabeprazole sodium
DR   226904-80-9
MF   C18 H21 N3 O3 S . Na
CI   COM
SR   CA
LC   STN Files:   ADISINSIGHT, ADISNEWS, ANABSTR, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CIN, DDFU, DIOGENES,
       DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT,
       SYNTHLINE, TOXCENTER, USAN, USPATFULL
         (*File contains numerically searchable property data)
CRN  (117976-89-3)
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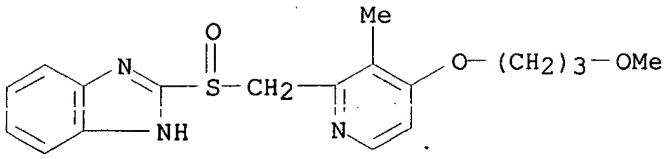
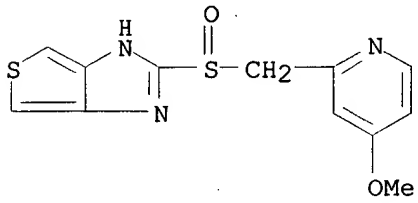


● Na

60 REFERENCES IN FILE CA (1967 TO DATE)
60 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN 111371-26-7 REGISTRY
CN 1H-Thieno[3,4-d]imidazole, 2-[[(4-methoxy-2-pyridinyl)methyl]sulfinyl]-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN **S 4216**
FS 3D CONCORD
MF C12 H11 N3 O2 S2
SR CA
LC STN Files: ADISINSIGHT, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, USPATFULL
(*File contains numerically searchable property data)

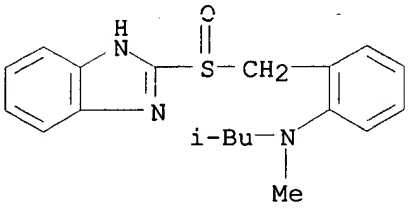


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN 104340-86-5 REGISTRY
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-[2-(N-Isobutyl-N-methylamino)benzylsulfinyl]benzimidazole
CN **Leminoprazole**
CN NC 130003
FS 3D CONCORD
MF C19 H23 N3 O S
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, DDFU, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, PHAR, PROMT, SYNTHLINE,

TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)

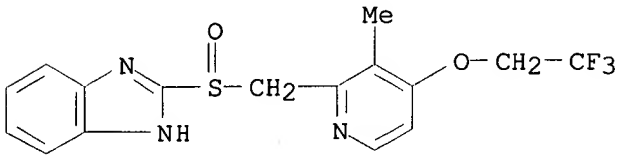


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

65 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
65 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN 103577-45-3 REGISTRY
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (.+-.)-Lansoprazole
CN 2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazole
CN A 65006
CN AG 1749
CN Agopton
CN Ilsatec
CN Ketian
CN Lancid
CN Lanfast
CN Lanproton
CN Lansopep
CN **Lansoprazole**
CN Lanston
CN Lanz
CN Lanzol 30
CN Lanzopral
CN Lanzor
CN Ogastro
CN PP/K-10
CN Prevacid
CN Promp
CN Prosogan
CN Suprecid
CN Takepron
CN Ulpax
CN Zoton
FS 3D CONCORD
DR 154727-72-7
MF C16 H14 F3 N3 O2 S
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES,

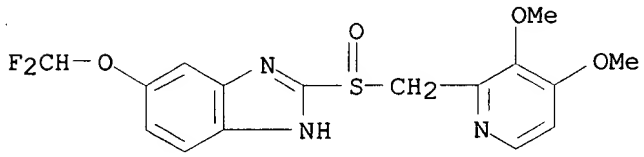
EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

663 REFERENCES IN FILE CA (1967 TO DATE)
9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
667 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN 102625-70-7 REGISTRY
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5-(Difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridyl)methyl]sulfinyl]-1H-benzimidazole
CN BY 1023
CN **Pantoprazole**
CN SKF 96022
FS 3D CONCORD
DR 154644-14-1
MF C16 H15 F2 N3 O4 S
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, MSDS-OHS, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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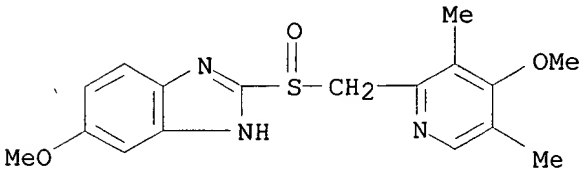
303 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN 73590-58-6 REGISTRY
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (.+-.)-Omeprazole
CN 2-[[(3,5-Dimethyl-4-methoxy-2-pyridyl)methyl]sulfinyl]-5-methoxy-1H-benzimidazole
CN Acidex
CN Antra
CN Antra MUPS
CN Audazol
CN Aulcer
CN Belmazol
CN Ceprandal
CN Desec
CN Dizprazol
CN Dudencer
CN Elgam
CN Emeproton
CN Epirazole
CN Gastrimut
CN Gastroloc
CN Gastrozole
CN Gibancer
CN H 168/68
CN Indurgan
CN Inhibitron
CN Inhipump
CN Logastric
CN Lomac
CN Losec
CN Miol
CN Miracid
CN Mopral
CN Ocid
CN Omapren
CN Omebeta 20
CN Omed
CN Omedar
CN OMEP
CN Omepral
CN **Omeprazole**
CN Omeprazon
CN Omepril
CN Omezol
CN Omezzol
CN Omid
CN Omisec
CN Omizac
CN OMP
CN Ompanyt
CN OMZ
CN Oprax
CN Opraz
CN Ozoken
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS 3D CONCORD
DR 172964-80-6, 131959-78-9

MF C17 H19 N3 O3 S
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO

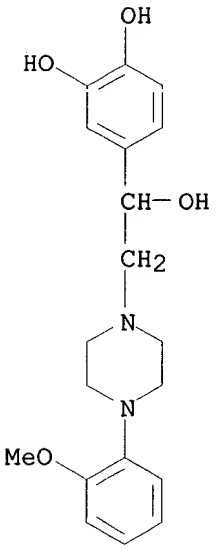


5,413,38

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2055 REFERENCES IN FILE CA (1967 TO DATE)
39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2063 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L9 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN 15534-05-1 REGISTRY
CN 1,2-Benzenediol, 4-[1-hydroxy-2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Piperazineethanol, .alpha.-(3,4-dihydroxyphenyl)-4-(o-methoxyphenyl)-(8CI)
OTHER NAMES:
CN 711SE
CN Pipratecol
CN **S 4216**
FS 3D CONCORD
MF C19 H24 N2 O4
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CHEMLIST, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, TOXCENTER, USAN
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



514/252.12
255.03

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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=> d que l11
L10 (        54)SEA FILE=REGISTRY ABB=ON  (73590-58-6 OR 103577-45-3 OR
                1-2625-70-7 OR 117976-90-6 OR 104340-86-5 OR 111371-26-7 OT
                15534-05-1)/CRN
L11          64 SEA FILE=REGISTRY ABB=ON  L10 OR 102625-70-7/CRN

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 10:28:58 ON 14 MAR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d his l12-

(FILE 'REGISTRY' ENTERED AT 10:18:06 ON 14 MAR 2002)

FILE 'HCAPLUS' ENTERED AT 10:18:19 ON 14 MAR 2002

```
L12         2663 S L9 OR L11
L13         5829 S ANTIULCER?
L14        16093 S ULCER#
L15          562 S L12 AND L13
L16          619 S L14 AND L12
L17          840 S L15 OR L16
L18         2220 S PROTON (L) PUMP?
L19         4874 S (PROTON (L) PUMP? )/AB
L20         5752 S L18 OR L19
L21          243 S L20 AND L17
L22          140 S L18 AND L17
L23          629 S L18  (L) INHIBIT?
L24          139 S L22 AND L23
L25        53985 S (OXYGEN (L) CONSUMP?  OR FATIGUE?)
L26            1 S L24 AND L25
L27         3981 S PHYSI? (L) PERFORM?
L28            1 S L27 AND L24
L29        68634 S (OXYGEN (5A) CONSUMP?  OR FATIGUE?)/AB
L30         4251 S (PHYSI? (5A) PERFORM?)/AB
L31        72801 S L29 OR L30
L32            1 S L24 AND L31
L33            1 S L26 OR L28 OR L32
L34        58079 S DRUG (L) DELIVER? (L) SYSTEM?
L35           18 S L34 AND L24
L36       567092 S OXYGEN?/AB OR OXYGEN?
L37            2 S L24 AND L36
L38       701613 S HUMAN OR HORSE OR DOG
L39            7 S L24 AND L38
L40           11 S L33 OR LL35 OR L37 OR L39
L41           24 S L33 OR L35 OR L37 OR L39
L42           19 S L24 AND 63/SX,SC
L43            6 S L42 NOT L41
```

FILE 'REGISTRY' ENTERED AT 10:28:25 ON 14 MAR 2002

FILE 'HCAPLUS' ENTERED AT 10:28:58 ON 14 MAR 2002

=> d .ca hitstr l41 1-24;d .ca hitstr l43 1-6

L41 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:885754 HCAPLUS

DOCUMENT NUMBER: 136:651
TITLE: Methods for prevention of **ulcers** and improving **physiological performance** by administering a **proton pump inhibitor**
INVENTOR(S): Pipers, Frank
PATENT ASSIGNEE(S): Merial Ltd., UK
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091748	A2	20011206	WO 2001-EP5788	20010518

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-207878 P 20000530
OTHER SOURCE(S): MARPAT 136:651

AB Methods for preventing ulcers, such as gastric ulcers, as well as for improving **oxygen consumption** and/or time to **fatigue** in horses, dogs, or humans involving administering a proton pump inhibitor (PPI) are disclosed and claimed. The specific PPIs claimed for use are omeprazole, lansoprazole, pantoprazole, E-3810, leminoprazole, and S-4216. Formulations contg. the PPIs are also claimed.

IC ICM A61K031-415
ICS A61K031-44; A61P001-04
CC 1-9 (Pharmacology)
ST **ulcer** prevention **physiol performance** improvement **proton pump inhibitor; horse ulcer** prevention **physiol performance** improvement **proton pump inhibitor; dog ulcer** prevention **physiol performance** improvement **proton pump inhibitor**
IT **Drug delivery systems**
(bolus; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)
IT **Drug delivery systems**
(capsules; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)
IT **Drug delivery systems**
(controlled-release; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**
)
IT **Drug delivery systems**
(gels; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation

contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(granules; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Antiulcer** agents
Dog (Canis familiaris)
Fatigue, biological
Horse (Equus caballus)
Human
Respiration, animal
(methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

IT **Drug delivery systems**
(oral pastes; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(powders; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT Feed
(premix; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(solns., oral; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(suspensions, oral; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(sustained-release; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT **Drug delivery systems**
(tablets; methods for prevention of **ulcers** and improving **physiol. performance** by administering a formulation contg. a **proton pump inhibitor**)

IT Digestive tract
Stomach, disease
(**ulcer**; methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

IT **111371-26-7**, S 4216
RL: PAC (Pharmacological activity); BIOL (Biological study)
(S 4216; methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

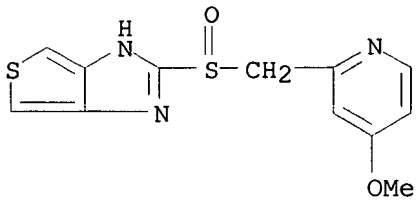
IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole

117976-90-6, E-3810
RL: PAC (Pharmacological activity); BIOL (Biological study)
(methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

IT 9000-83-3
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**proton**-translocating, **inhibitor**; methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

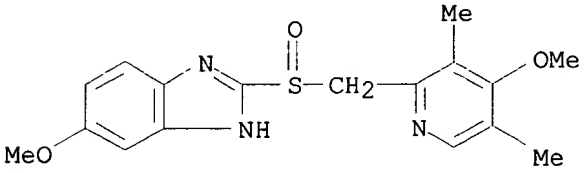
IT **111371-26-7**, S 4216
RL: PAC (Pharmacological activity); BIOL (Biological study)
(S 4216; methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

RN 111371-26-7 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole, 2-[[(4-methoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

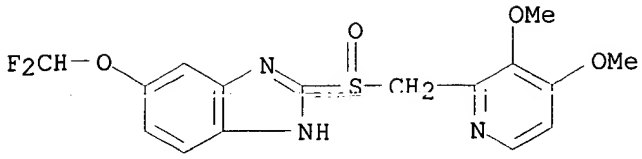


IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole **117976-90-6**, E-3810
RL: PAC (Pharmacological activity); BIOL (Biological study)
(methods for prevention of **ulcers** and improving **physiol. performance** by administering a **proton pump inhibitor**)

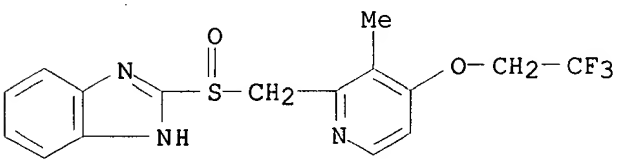
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



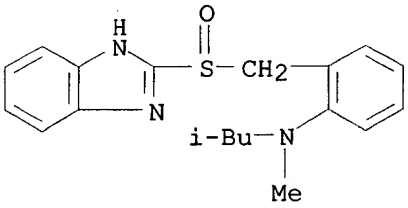
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



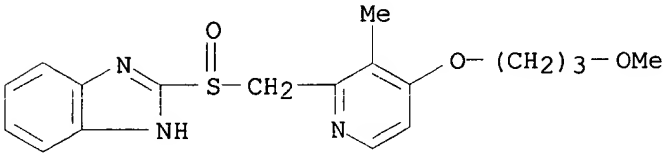
RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 104340-86-5 HCAPLUS
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)



RN 117976-90-6 HCAPLUS
CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)



● Na

L41 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:247197 HCAPLUS
DOCUMENT NUMBER: 134:247252
TITLE: Use of pentagastrin to inhibit gastric acid secretion or as a diuretic
INVENTOR(S): Pisegna, Joseph R.; Wank, Stephen

PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001022985	A1	20010405	WO 2000-US26992	20000928

W: CA, JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1999-156491 P 19990928
US 2000-671764 A 20000927

AB Pentagastrin, when administered in conjunction with a proton pump inhibitor (PPI), is synergistic with the PPI and significantly increases the efficacy of the PPI in reducing/mitigating excess gastric acid secretion.

IC ICM A61K038-00
CC 1-9 (Pharmacology)
Section cross-reference(s): 2
ST pentagastrin **proton pump inhibitor** gastric acid secretion; diuretic pentagastrin gastric acid secretion
IT Kidney
(CCKB/gastrin receptors; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Ear
(Meniere's disease; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Macrolides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Stomach, disease
(atrophic gastritis; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Cholecystokinin receptors
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(cholecystokinin B; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Esophagus
(esophagitis; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Kidney, disease
(failure, acute, fluid retention assocd. with; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Kidney, disease

(failure, chronic, fluid retention assocd. with; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Heart, disease
Liver, disease
(failure, fluid retention assocd. with; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Cirrhosis
(fluid retention assocd. with; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Digestive tract
(gastroesophageal reflux; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Kidney, disease
Liver, disease
(hepatorenal syndrome; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT **Drug delivery systems**
(injections, s.c.; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Antibiotics
(macrolide; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Diabetes insipidus
(nephrogenic; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Antibiotics
Antihypertensives
Antiulcer agents
Calculi, renal
Diuretics
(pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Tetracyclines
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT **Ulcer**
(peptic; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

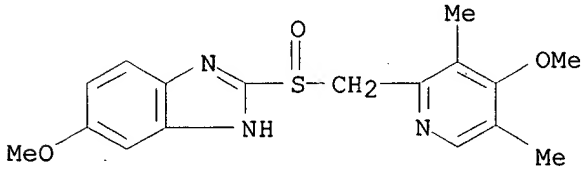
IT Pericardium
(pericarditis, constrictive; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Antibiotics
(quinolone, fluoroquinolone; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

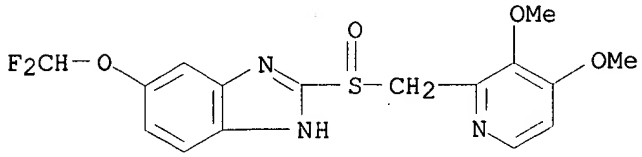
IT Acidosis
(renal tubular; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

IT Gastric acid
(secretion; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)

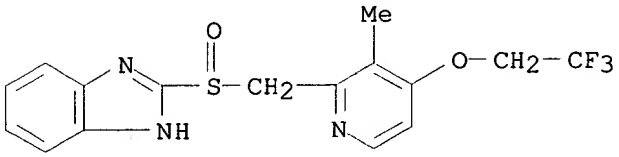
IT Drug interactions
(synergistic; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT Kidney, disease
(tubular acidosis; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT 13721-01-2D, derivs., antibiotics
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fluoroquinolone antibiotics; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT 7440-70-2, Calcium, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(kidney stone; pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT 76824-35-6, Famotidine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT 60-54-8D, Tetracycline, derivs. 1406-05-9, Penicillin 5534-95-2, Pentagastrin 5534-95-2D, Pentagastrin, analogs 9002-76-0, Gastrin 9002-76-0D, Gastrin, analogs 11111-12-9, Cephalosporin 11111-12-9D, Cephalosporin, derivs. **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT 7440-23-5, Sodium, biological studies 9000-83-3, ATPase 12408-02-5, Hydrogen ion, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pentagastrin, gastrin, or analog and **proton pump inhibitor** in reducing gastric acid secretion)
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:225254 HCAPLUS
DOCUMENT NUMBER: 134:242695
TITLE: Tablet composition containing **proton pump inhibitors** and antibiotics for the treatment of stomach infections
PATENT ASSIGNEE(S): Weikl, Andreas, Germany
SOURCE: Ger. Gebrauchsmusterschrift, 10 pp.
CODEN: GGXXFR
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 29918478	U1	20010329	DE 1999-29918478	19991021

AB The invention concerns tablet compns. that contain proton pump inhibitors and antibiotics for the treatment of stomach infections. Typical tablet compn. contains (mg): Omeprazole 20; clarithromycin 250; metronidazol 500.
IC ICM A61K045-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
ST tablet compn **proton pump inhibitor** antibiotic stomach infection
IT Antibacterial agents
Antibiotics
Antiulcer agents
(Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

IT **Drug delivery systems**
(enteric; Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

IT Biological transport
(hydrogen ion, **inhibitors**; Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

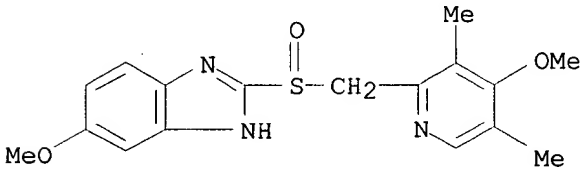
IT Stomach, disease
(infection; Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

IT **Drug delivery systems**
(tablets; Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

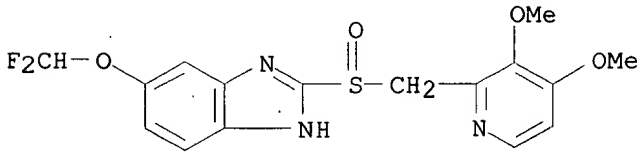
IT 443-48-1, Metronidazol **73590-58-6**, Omeprazole 81103-11-9, Clarithromycin **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Tablet compn. contg. **proton pump inhibitors** and antibiotics for the treatment of stomach infections)

RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

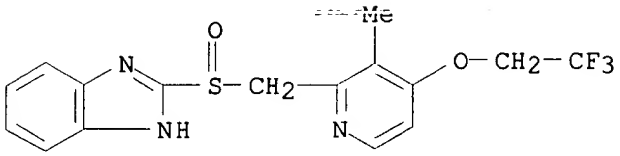


RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:905577 HCAPLUS
DOCUMENT NUMBER: 134:61531
TITLE: Stabilized compositions containing benzimidazole compounds or their alkali metal salts and their enteric coated preparations
INVENTOR(S): Ukai, Koji; Ichikawa, Masaki; Kato, Takashi; Sugatani, Yukiko; Suzuki, Yasuyuki; Aoki, Shigeru; Kato, Akiyoshi; Kawamura, Masao; Fujioka, Masaru
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000355540	A2	20001226	JP 1999-110462	19990419

PRIORITY APPLN. INFO.: JP 1998-109288 A 19980420
JP 1999-105797 A 19990413
OTHER SOURCE(S): MARPAT 134:61531

AB Compns. contg. benzimidazole compds. I (R1, R2 = H, OMe, OCHF2; R3 = H, Na; R4-R6 = H, Me, OMe, methoxypropoxy, trifluoroethoxy) or their alkali metal salts and .gtoreq.1 selected from Na2CO3, K2CO3, NaOH, KOH, aminoalkyl methacrylate copolymer E, arginine aspartate, hydroxypropyl cellulose, and crospovidone are claimed. Also claimed are enteric coated prepns. manufd. by coating core tablets comprising the compn. with enteric coating optionally via interlayer. I are stabilized in the compns. and prepns. and prevented from discoloration. A mixt. of rabeprazole Na 10, Na2CO3 10, and mannitol 100 g was granulated while spraying a EtOH soln. of 2.5 g hydroxypropyl cellulose, and the granules were mixed with Ca stearate and compressed to give tablets. The tablets were spray-coated with a H2O/EtOH soln. contg. hydroxypropyl Me cellulose phthalate to give enteric-coated tablets.

IC ICM A61K031-4439
ICS A61K009-28; A61P001-04; A61P043-00; A61K047-02; A61K047-30; A61K047-38; C07D401-12
CC 63-6 (Pharmaceuticals)
ST benzimidazole **proton pump inhibitor** stabilization sodium carbonate; enteric coating benzimidazole **proton pump inhibitor** stabilizer
IT Antioxidants
Antiulcer agents
Discoloration prevention agents
Stabilizing agents

(stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

IT **Drug delivery systems**
(tablets, enteric-coated; stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

IT 7757-83-7, Sodium sulfite
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antioxidant; stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

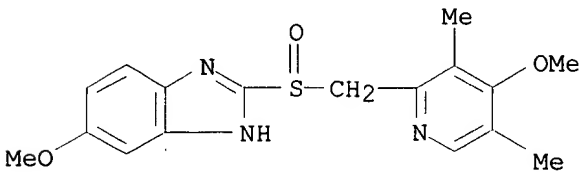
IT 9004-65-3, Hydroxypropyl methyl cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(moisture-proof layer; stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

IT 497-19-8, Sodium carbonate, biological studies 584-08-7, Potassium carbonate 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 7675-83-4, Arginine aspartate 9003-39-8, Crospovidone 9004-64-2, Hydroxypropyl cellulose 24938-16-7, Eudragit E
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

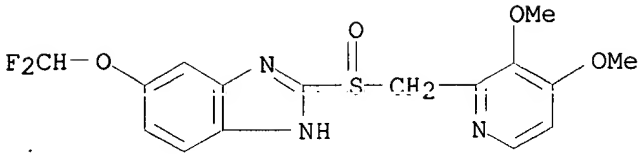
IT 9050-31-1, Hydroxypropyl methyl cellulose phthalate **73590-58-6**, Omeprazole 76633-00-6, Kollidon CL **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole **117976-90-6**, Rabeprazole sodium 185702-31-2, Kollidon CLM
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **117976-90-6**, Rabeprazole sodium
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilized compns. of benzimidazole **proton pump inhibitors** contg. specific stabilizers and enteric-coated tablets thereof)

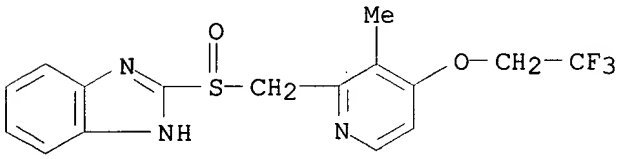
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



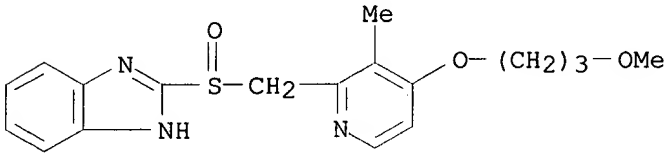
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 117976-90-6 HCAPLUS
CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)



● Na

L41 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:824107 HCAPLUS
DOCUMENT NUMBER: 134:526
TITLE: Pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor**
INVENTOR(S): Rumsey, William Leroy; Furr, Barrington John Albert
PATENT ASSIGNEE(S): AstraZeneca AB, Swed.
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069438	A1	20001123	WO 2000-GB1775	20000509

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: GB 1999-11017 A 19990513

AB Disclosed are a combination comprising an NK-1 antagonist and an agent capable of reducing the pH of gastric juice in the gut, and pharmaceutical compns. contg. the combination, and methods of using the combination for treating various diseases, such as gastroesophageal reflux disease. A patient suffering from gastroesophageal reflux disease was successfully treated with a combination of omeprazole and 3-cyano-N-[(2R)-2-(3,4-dichlorophenyl)-4-[4-[2-[(R)-methylsulfinyl]phenyl]-1-piperidinyl]butyl]-2-methoxy-N-methyl-1-naphthalenecarboxamide.

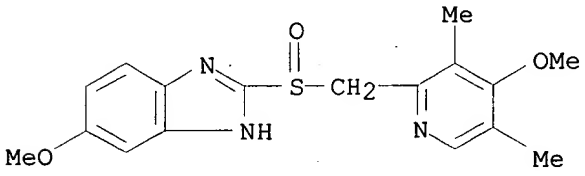
IC ICM A61K031-445
ICS A61K031-44
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
ST NK1 antagonist **antiulcer** gastric reflux disease
IT Antihistamines
(H2; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Tachykinin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NK1; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Stomach, disease
(asthma; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Intestine, disease
(duodenum, **ulcer**; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Esophagus
(esophagitis; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Digestive tract
(gastroesophageal reflux; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT **Drug delivery systems**
(oral; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT **Antiulcer** agents
(pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Digestive tract
(pyrosis; pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)
IT Stomach, disease
(**ulcer**; pharmaceutical combination of neurokinin receptor

antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)

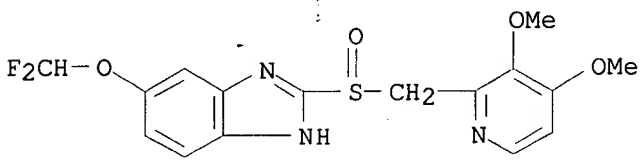
IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole 117976-89-3, Rabeprazole 119141-88-7, S-Omeprazole 255049-08-2 255049-09-3 263387-62-8 263860-83-9 263860-95-3 263860-97-5 263860-99-7 263861-01-4 274928-86-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical combination of neurokinin receptor antagonist and **proton pump inhibitor** for treatment of gastric acid reflux disease)

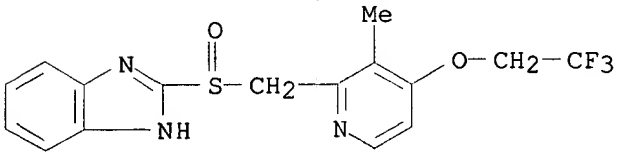
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



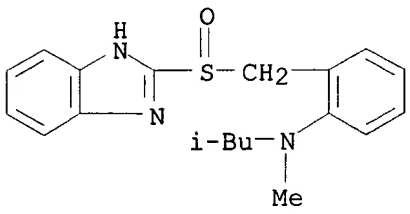
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 104340-86-5 HCAPLUS
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:627972 HCAPLUS
DOCUMENT NUMBER: 133:213185
TITLE: Methods and compositions using (-)-norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists
INVENTOR(S): Rubin, Paul D.; Barberich, Timothy J.
PATENT ASSIGNEE(S): Sepracor Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000051584	A2	20000908	WO 2000-US5167	20000301
WO 2000051584	A3	20010907		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1156853	A2	20011128	EP 2000-915919	20000301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000008664	A	20011218	BR 2000-8664	20000301
NO 2001004229	A	20011101	NO 2001-4229	20010831

PRIORITY APPLN. INFO.: US 1999-122393 P 19990302
WO 2000-US5167 W 20000301

AB The invention relates to methods and compns. for the prevention, treatment, or management of gastrointestinal disorders or symptoms thereof, employing two or more agents or compds. to provide a triple site action on 5-HT3 receptors, 5-HT4 receptors, and at least one of H2 receptors and proton pumps. The IC50 of (-)-norcisapride for binding to 5HT3 was 30.4 nM. A tablet contained (-)-norcisapride 5.0, lansoprazole 5.0, lactose 57.0, starch 20.0, microcryst. cellulose 10.0, hydrogenated vegetable oil 1.5, and polyvinylpyrrolidinone 1.5 mg.

IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
ST norcisapride **proton pump inhibitor** tablet
lansoprazole; histamine receptor antagonist norcisapride tablet
IT 5-HT antagonists
(5-HT3; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT 5-HT receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(5-HT4, agonists and antagonists; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Antihistamines
(H2; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(capsules; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Intestine, disease
(constipation; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Digestive tract
(disease; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Gastrointestinal motility
(disorder, dysmotility, dysmotility; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Esophagus
(esophagitis, erosive; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Digestive tract
(gastroesophageal reflux; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Stomach, disease
(gastroparesis; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(granules; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Intestine, disease
(ileus, post-operative; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Digestive tract
(indigestion; methods and compns. using norcisapride in combination

with **proton pump inhibitors** or H2 receptor antagonists)

IT Dyspepsia
Vomiting
(methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(oral; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(parenterals; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Digestive tract
(pyrosis; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(rectal; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Gastric acid
(secretion, hyper-; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Stomach
(sour; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(sublingual; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(tablets; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(transdermal; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

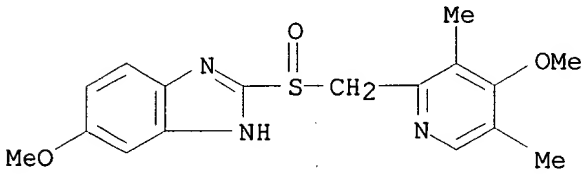
IT Digestive tract
(**ulcer**; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine **73590-58-6**, Omeprazole 76824-35-6, Famotidine 76963-41-2, Nizatidine 81098-60-4, (.+-.)-Cisapride 84946-16-7 86718-70-9, (+)-Cisapride 86719-31-5, (-)-Cisapride 92340-57-3, Hydroxyomeprazole 99614-60-5 **102625-70-7**, Pantoprazole **102625-70-7D**, Pantoprazole, desmethyl derivs. **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole 186260-03-7, (-)-Norcisapride 202590-69-0, (+)-Norcisapride 290837-87-5
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

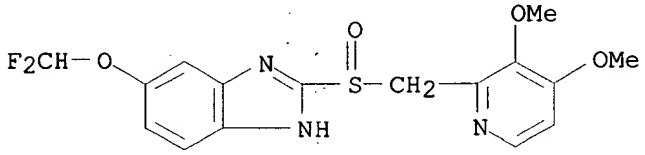
IT 9000-83-3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**proton**-translocating, **inhibitors**; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **102625-70-7D**, Pantoprazole, desmethyl derivs. **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

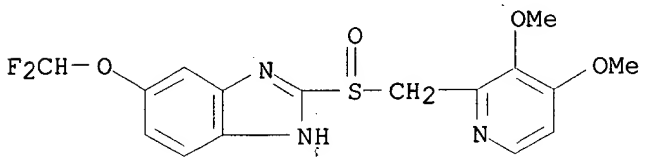
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



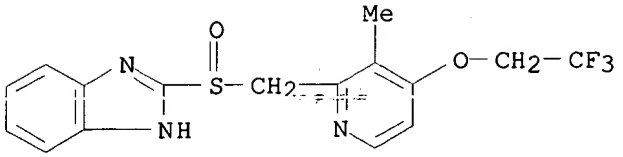
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:627971 HCAPLUS
DOCUMENT NUMBER: 133:213184
TITLE: Methods and compositions using (+)-norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists
INVENTOR(S): Rubin, Paul D.; Barberich, Timothy J.
PATENT ASSIGNEE(S): Sepracor Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000051583	A2	20000908	WO 2000-US5166	20000301
WO 2000051583	A3	20010201		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6353005	B1	20020305	US 2000-507965	20000222
EP 1156852	A2	20011128	EP 2000-912067	20000301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000008687	A	20020108	BR 2000-8687	20000301
NO 2001004230	A	20011101	NO 2001-4230	20010831

PRIORITY APPLN. INFO.: US 1999-122394 P 19990302
WO 2000-US5166 W 20000301

AB The invention relates to methods and compns. for the prevention, treatment, or management of gastrointestinal disorders or symptoms thereof, employing two or more agents or compds. to provide a triple site action on 5-HT3 receptors, 5-HT4 receptors, and at least one of H2 receptors and proton pumps. The IC50 of (+)-norcisapride for binding to 5HT3 was 4.5 nM. A tablet contained (+)-norcisapride 5.0, lansoprazole 5.0, lactose 57.0, starch 20.0, microcryst. cellulose 10.0, hydrogenated vegetable oil 1.5, and polyvinylpyrrolidinone 1.5 mg.

IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
ST norcisapride **proton pump inhibitor** tablet
lansoprazole; histamine receptor antagonist norcisapride tablet
IT 5-HT antagonists

(5-HT3; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT 5-HT receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(5-HT4, agonists and antagonists; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Antihistamines
(H2; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(capsules; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Intestine, disease
(constipation; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Digestive tract
(disease; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Gastrointestinal motility
(disorder, dysmotility, dysmotility; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Esophagus
(esophagitis, erosive; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Digestive tract
(gastroesophageal reflux; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Stomach, disease
(gastroparesis; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **Drug delivery systems**
(granules; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Intestine, disease
(ileus, post-operative; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

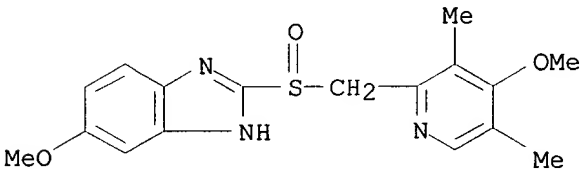
IT Digestive tract
(indigestion; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT Dyspepsia
Vomiting
(methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor

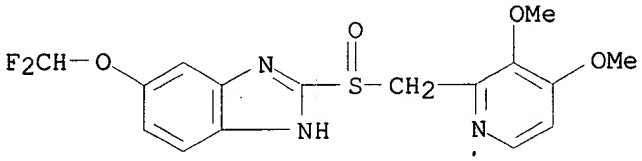
antagonists)
IT **Drug delivery systems**
(oral; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(parenterals; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Digestive tract
(pyrosis; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(rectal; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Gastric acid
(secretion, hyper-; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Stomach
(sour; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(sublingual; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(tablets; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT **Drug delivery systems**
(transdermal; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT Digestive tract
(**ulcer**; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine **73590-58-6**, Omeprazole 76824-35-6, Famotidine 76963-41-2, Nizatidine 81098-60-4, (.+-.)-Cisapride 84946-16-7 86718-70-9, (+)-Cisapride 86719-31-5, (-)-Cisapride 92340-57-3, Hydroxyomeprazole 99614-60-5 **102625-70-7**, Pantoprazole **102625-70-7D**, Pantoprazole, desmethyl derivs. **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole 186260-03-7, (-)-Norcisapride 202590-69-0, (+)-Norcisapride 290837-87-5
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)
IT 9000-83-3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**proton**-translocating, **inhibitors**; methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **102625-70-7D**, Pantoprazole, desmethyl derivs. **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. using norcisapride in combination with **proton pump inhibitors** or H2 receptor antagonists)

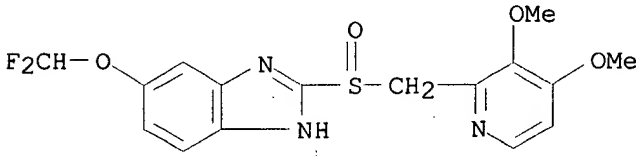
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



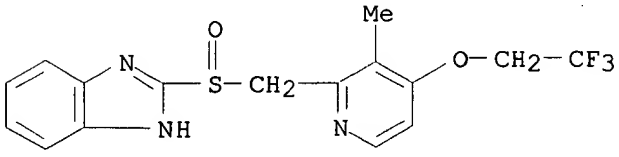
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:608578 HCAPLUS
DOCUMENT NUMBER: 133:203023
TITLE: Nitrosated and nitrosylated **proton pump inhibitors**, compositions and methods of use
INVENTOR(S): Garvey, David S.; Letts, L. Gordon; Tam, Sang William; Wang, Tiansheng; Richardson, Stewart K.
PATENT ASSIGNEE(S): Nitromed, Inc., USA
SOURCE: PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050037	A1	20000831	WO 2000-US2524	20000225
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1154771	A1	20011121	EP 2000-910039	20000225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-122111 P 19990226
WO 2000-US2524 W 20000225
OTHER SOURCE(S): MARPAT 133:203023

AB The invention describes nitrosated and/or nitrosylated proton pump inhibitor compds., as well as compns. comprising .gtoreq.1 proton pump inhibitor compd. that is optionally substituted with .gtoreq.1 NO and/or NO2 group, and, optionally, .gtoreq.1 compd. that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase, and/or .gtoreq.1 nonsteroidal antiinflammatory drug, selective COX-2 inhibitor antacid, bismuth-contg. reagent, acid-degradable antibacterial compd., and mixts. thereof. The invention also provides methods for treating and/or preventing gastrointestinal disorders; facilitating ulcer healing; decreasing the recurrence of ulcers; improving gastroprotective properties, anti-Helicobacter pylori properties or antacid properties of proton pump inhibitors; decreasing or reducing the gastrointestinal toxicity assocd. with the use of nonsteroidal antiinflammatory compds.; and treating Helicobacter pylori and viral infections. The compds. and/or compns. of the present invention can also be provided in the form of a pharmaceutical kit. Prepn. of e.g. nitrosylated lansoprazole is described. Compared to lansoprazole, the nitrosylated lansoprazole significantly inhibited the formation of EtOH/HCl-induced gastric lesions.

IC ICM A61K031-437
ICS A61K031-4184; A61K031-4439; C07D471-04; C07D401-12; C07D235-28
CC 1-12 (Pharmacology)
Section cross-reference(s): 28, 63
ST nitrosated nitrosylated **proton pump inhibitor**

therapeutic; gastrointestinal drug nitrosated nitrosylated **proton pump inhibitor**; **ulcer** treatment nitrosated nitrosylated **proton pump inhibitor**; Helicobacter antacid nitrosated nitrosylated **proton pump inhibitor**; viral infection nitrosated nitrosylated **proton pump inhibitor**; NSAID toxicity nitrosated nitrosylated **proton pump inhibitor**; lansoprazole nitrosylated prepn gastric lesion **inhibition**

IT Intestine, disease
(Crohn's; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Nitrosamines
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-oxo; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Thiols (organic), biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(S-nitroso; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Antibacterial agents
(acid-degradable; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Leukemia
(basophilic, hypersecretory state assocd. with; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(colitis; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Helicobacter pylori
(disease assocd. with; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(diverticulitis; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT **Antiulcer** agents
(duodenal; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(enteritis, infectious; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Digestive tract
(gastroesophageal reflux; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Drugs
(gastrointestinal; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Stomach, disease

(gastroparesis; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Gastric acid
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(hyperacidity; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(inflammatory; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(irritable bowel syndrome; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Mast cell
(mastocytoma, systemic, hypersecretory state assocd. with; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Adenoviridae
Antacids
Antiulcer agents
Antiviral agents
Arenaviridae
Bunyaviridae
Coronaviridae
Cytomegalovirus
Drug delivery systems
Dyspepsia
Herpesviridae
Human herpesvirus
Human herpesvirus 3
Human herpesvirus 4
Human herpesvirus 6
Human herpesvirus 7
Orthomyxoviridae
Papovaviridae
Paramyxoviridae
Picornaviridae
Poxviridae
Pseudorabies virus
Retroviridae
Rhabdoviridae
Togaviridae
(nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Amino acids, biological studies
Carbohydrates, biological studies
Heterocyclic compounds
Hydrocarbons, biological studies
Oligonucleotides
Proteins, general, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nitrosylated; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Anti-inflammatory agents
(nonsteroidal; nitrosated and nitrosylated **proton**

pump inhibitors, compns., combinations, and methods of use)

IT Toxicity
(of NSAIDs and COX-2 **inhibitors**; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT **Antiulcer** agents
(peptic; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Virus
(rhinotracheitis; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(short bowel syndrome; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Stress, animal
(stress **ulcer, inhibitors**; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT Intestine, disease
(ulcerative colitis; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT 39391-18-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cyclooxygenase-2, **inhibitors**; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT 51-45-6, Histamine, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(hyperhistaminemia, hypersecretory state assocd. with; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT 125978-95-2, Nitric oxide synthase
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT 51-17-2D, Benzimidazole, nitrosated and nitrosylated derivs. 56-85-9, Glutamine, biological studies 56-87-1, Lysine, biological studies 70-26-8, Ornithine 74-79-3, L-Arginine, biological studies 74-79-3D, L-Arginine, nitrosated and nitrosylated derivs. 91-22-5D, Quinoline, nitrosated and nitrosylated derivs. 156-86-5, L-Homoarginine 253-82-7D, Quinazoline, nitrosated and nitrosylated derivs. 271-63-6D, 1H-Pyrrolo[2,3-b]pyridine, nitrosated and nitrosylated derivs. 273-21-2D, 1H-Imidazo[4,5-b]pyridine, nitrosated and nitrosylated derivs. 274-76-0D, Imidazo[1,2-a]pyridine, nitrosated and nitrosylated derivs. 288-32-4D, Imidazole, nitrosated and nitrosylated derivs. 289-06-5D, Thiadiazole, nitrosated and nitrosylated derivs. 289-95-2D, Pyrimidine, nitrosated and nitrosylated derivs. 372-75-8, Citrulline 504-77-8D, 4,5-Dihydrooxazole, nitrosated and nitrosylated derivs. 578-68-7D, 4-Aminoquinoline, nitrosated and nitrosylated derivs. 7440-69-9D, Bismuth, compds. 17038-52-7D, 1,2,4-Thiadiazolo[4,5-a]benzimidazole, nitrosated and nitrosylated derivs. 51209-75-7, S-Nitrosocysteine 53054-07-2 53054-07-2D, nitrosated and nitrosylated derivs. 56577-02-7, S-Nitroso-N-acetylcysteine 57237-97-5D, Timoprazole, nitrosated and nitrosylated derivs. 57564-91-7, S-Nitrosoglutathione 57564-91-7D, derivs. **73590-58-6D**, Omeprazole, nitrosated and

nitrosylated derivs. 79032-48-7, S-Nitroso-N-acetylpenicillamine 85330-45-6D, nitrosated and nitrosylated derivs. 99499-40-8D, Disuprazole, nitrosated and nitrosylated derivs. 101387-97-7D, RO 18-5362, nitrosated and nitrosylated derivs. **102625-70-7D**, Pantoprazole, nitrosated and nitrosylated derivs. **103577-45-3D**, Lansoprazole, nitrosated and nitrosylated derivs. **104340-86-5D**, Leminoprazole, nitrosated and nitrosylated derivs. 113712-98-4D, Tenatoprazole, nitrosated and nitrosylated derivs. 117976-89-3D, Rabeprazole, nitrosated and nitrosylated derivs. 121617-11-6D, Hoe-731, nitrosated and nitrosylated derivs. 122130-63-6, S-Nitrosocaptopril 125500-29-0D, nitrosated and nitrosylated derivs. 139427-42-2, S-Nitrosohomocysteine 172152-36-2D, IY 81149, nitrosated and nitrosylated derivs. 172152-45-3D, nitrosated and nitrosylated derivs. 178307-42-1D, YH 1885, nitrosated and nitrosylated derivs. 216382-88-6D, Imidazopyridine, nitrosated and nitrosylated derivs.
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT 10102-43-9, Nitric oxide, biological studies 90880-94-7, Endothelium-derived relaxing factor
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

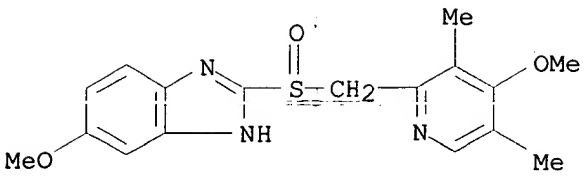
IT 9000-83-3, ATPase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT 23695-65-0P, Adamantane-2-thione 154150-97-7P 260268-02-8P 260268-03-9P 260268-08-4P 290291-78-0P 290291-79-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

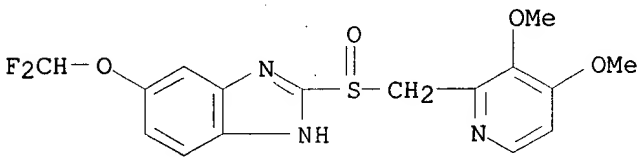
IT 100-46-9, Benzylamine, reactions 108-30-5, reactions 540-80-7, tert-Butyl nitrite 540-88-5, tert-Butyl acetate 700-58-3, Adamantan-2-one 15581-80-3, .alpha.,.alpha.'-Dithiodiisobutyraldehyde 57237-97-5, Timoprazole **103577-45-3**, Lansoprazole
RL: RCT (Reactant)
(reaction; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

IT **73590-58-6D**, Omeprazole, nitrosated and nitrosylated derivs.
102625-70-7D, Pantoprazole, nitrosated and nitrosylated derivs.
103577-45-3D, Lansoprazole, nitrosated and nitrosylated derivs.
104340-86-5D, Leminoprazole, nitrosated and nitrosylated derivs.
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)

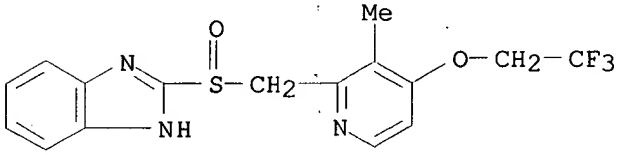
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



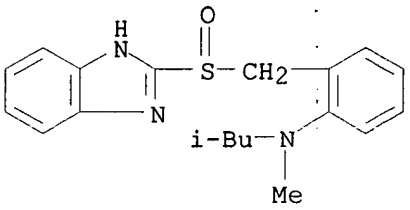
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



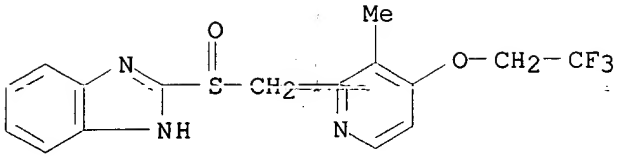
RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 104340-86-5 HCAPLUS
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)



IT **103577-45-3**, Lansoprazole
RL: RCT (Reactant)
(reaction; nitrosated and nitrosylated **proton pump inhibitors**, compns., combinations, and methods of use)
RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:558501 HCAPLUS
DOCUMENT NUMBER: 134:12948
TITLE: Pantoprazole: A new benzimidazole **proton pump inhibitor** for oral and IV administration
AUTHOR(S): Smith, Candace
CORPORATE SOURCE: Clinical pharmacy practice department, College of Pharmacy and Allied Health Professions, St. John's University, Jamaica, NY, USA
SOURCE: Formulary (2000), 35(1), 28-30,33-34,37
CODEN: FORMF9; ISSN: 1082-801X
PUBLISHER: Advanstar Communications, Inc.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review with 34 refs. is given. Pantoprazole is an irreversible proton pump inhibitor that effectively reduces gastric acid secretion. In clin. trials, pantoprazole was well tolerated and efficacious in the treatment of both duodenal and gastric ulcers as well as gastro-esophageal reflux disease. Preliminary results indicate that pantoprazole is effective in eradicating Helicobacter pylori when combined with antibacterial agents. In comparative trials, pantoprazole was superior to H2-receptor antagonists and as effective as other proton pump inhibitors in the treatment of peptic ulcer disease or reflux esophagitis. It is well tolerated and offers a once-daily dosing schedule (40 mg) similar to those of other proton pump inhibitors. The most common adverse effects reported with pantoprazole included diarrhea, headache, dizziness, pruritus, and skin rash. The availability of an i.v. formulation and minimal drug interactions are potential advantages over other proton pump inhibitors.

CC 1-0 (Pharmacology)

ST review pantoprazole **proton pump inhibitor** **antiulcer**

IT **Drug delivery systems**
(oral; pantoprazole, a **proton pump inhibitor** for oral and i.v. administration)

IT Antacids
Antiulcer agents
(pantoprazole, a **proton pump inhibitor** for oral and i.v. administration)

IT **Drug delivery systems**
(parenterals; pantoprazole, a **proton pump inhibitor** for oral and i.v. administration)

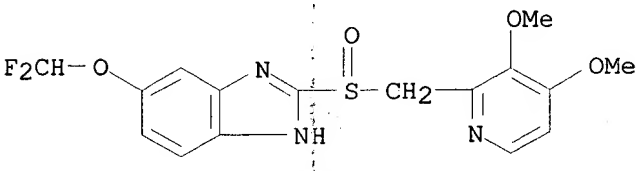
IT **102625-70-7**, Pantoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pantoprazole, a **proton pump inhibitor**

for oral and i.v. administration)

IT **102625-70-7**, Pantoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pantoprazole, a **proton pump inhibitor**
for oral and i.v. administration)

RN 102625-70-7 HCAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:190931 HCAPLUS
DOCUMENT NUMBER: 132:231932
TITLE: Taurolidine and/or taurultam against infectious **ulcer** or gastritis
INVENTOR(S): Pfirrmann, Rolf
PATENT ASSIGNEE(S): Ed Geistlich Sohne A.-G. fur Chemische Industrie, Switz.; Pett, Christopher
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000015232	A1	20000323	WO 1999-GB3030	19990913
W: CA, JP, RU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6117868	A	20000912	US 1999-316115	19990520
EP 1112074	A1	20010704	EP 1999-946325	19990913
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1998-154451 A 19980916
US 1999-316115 A 19990520
WO 1999-GB3030 W 19990913

AB A method for the treatment of infectious gastrointestinal ulcer disease or infectious gastritis disease of microbially infected gastrointestinal tissue in a mammal involves administration of an antimicrobial amt. of an antimicrobial medicament which is cell wall constituent-inactivating by chem. reaction with cell wall constituents, endotoxin non-releasing, exotoxin-inactivating, or a combination thereof.

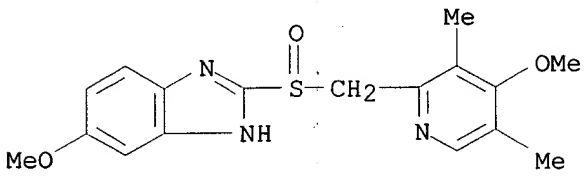
IC ICM A61K031-54
ICS A61P001-04; A61K031-54; A61K031-00

CC 1-5 (Pharmacology)
Section cross-reference(s): 63
ST taurolidine taurultam infectious **ulcer** gastritis; cell wall inactivating agent infectious **ulcer** gastritis; endotoxin inactivating agent infectious **ulcer** gastritis
IT **Drug delivery systems**
(capsules; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT Crosslinking agents
(cell-wall; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT Toxins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(endotoxins; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT Stomach, disease
(gastritis; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT Drugs
(gastrointestinal; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT **Drug delivery systems**
(liqs.; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT Stomach
(stomach-coating medication; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT **Drug delivery systems**
(suspensions; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT **Drug delivery systems**
(syrups; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT **Drug delivery systems**
(tablets; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT Antacids
Antibacterial agents
Antimicrobial agents
Antiulcer agents
Cell wall
Drug delivery systems
Helicobacter heilmannii
Helicobacter pylori
(taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT 9000-83-3, ATPase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**proton pump inhibitors**; taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT 471-34-1, Calcium carbonate, biological studies 19388-87-5, Taurolidine 38668-01-8, Taurultam 66357-59-3, Ranitidine hydrochloride **73590-58-6**, Omeprazole 117976-89-3, Rabeprazole 135752-28-2, Aluminum magnesium carbonate hydroxide 261778-33-0
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(taurolidine and/or taurultam against infectious **ulcer** or gastritis)
IT **73590-58-6**, Omeprazole

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(taurolidine and/or taurultam against infectious **ulcer** or gastritis)

RN 73590-58-6 HCAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:133673 HCAPLUS

DOCUMENT NUMBER: 132:180572

TITLE: Preparation of benzimidazole derivatives as prodrugs of **proton pump inhibitors**

INVENTOR(S): Garst, Michael E.; Sachs, George; Shin, Jai Moo

PATENT ASSIGNEE(S): Partnership of Michael E. Garst, George Sachs and Jai Moo Shin, USA

SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000009498	A1	20000224	WO 1999-US18048	19990809
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6093734	A	20000725	US 1998-131481	19980810
AU 9955518	A1	20000306	AU 1999-55518	19990809
BR 9912937	A	20010508	BR 1999-12937	19990809
EP 1105387	A1	20010613	EP 1999-942057	19990809
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FI 2001000248	A	20010209	FI 2001-248	20010209
NO 2001000693	A	20010305	NO 2001-693	20010209

PRIORITY APPLN. INFO.: US 1998-131481 A 19980810
US 1999-364381 A 19990729
WO 1999-US18048 W 19990809

OTHER SOURCE(S): MARPAT 132:180572

AB The title compds. Het1XSOHet2 [I; Het1 = II-III; X = CHR10, IV, V, etc.;

Het2 = VI-VIII (where N in the benzimidazole moiety represents that one of the ring carbons may be exchanged for an unsubstituted N atom); R1-R3 = H, alkyl, fluoroalkyl, etc.; R4, R5 = H, alkyl, fluoroalkyl, etc.; R6-R9 = H, alkyl, haloalkyl, etc.; R10 = H, alkyl; R10 may form an alkylene chain together with R3; R11, R12 = H, halo, alkyl, etc.; R15 = P(OR16)O2R16(R17), SOR16(R17), etc.; R16 = alkyl, morpholino, piperidino, etc.; R17 = alkyl, haloalkyl, alkoxy, etc.] which are prodrugs of the pyridyl Me sulfinyl benzimidazole type proton pump inhibitor drugs having a hydrolyzable sulfinyl or arylsulfonyl group attached to the benzimidazole nitrogen, or a group that forms a Mannich base with the benzimidazole nitrogen, were prepd. Thus, reacting 2-({[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl}sulfinyl)-1H-benzimidazole with pyridine-3-sulfonyl chloride in the presence of Et3N in CH2Cl2 afforded the title compd. IX. The prodrugs I hydrolyze under physiol. conditions to provide the proton pump inhibitors with a half life measurable in hours, and are capable of providing sustained plasma concns. of the proton pump inhibitor drugs for longer time than presently used drugs. The generation of the proton pump inhibitor drugs from the prodrugs of the invention (I) under physiol. conditions allows for more effective treatment of several diseases and conditions caused by gastric acid secretion (e.g., ulcers). Biol. data for compds. I were given.

IC ICM C07D401-12
ICS C07D401-14; C07D409-14; C07D417-14; C07D235-28; C07D471-04; A61K031-4184; A61K031-4439

CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST benzimidazole prepn prodrug **proton pump inhibitor**; gastric acid secretion **inhibitor** prodrug benzimidazole prepn; **antiulcer** benzimidazole prepn; ATPase gastric **inhibitor** prodrug benzimidazole prepn

IT **Antiulcer** agents
(prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

IT **Drug delivery systems**
(prodrugs; prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

IT Gastric acid
(secretion, **inhibition** of; prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

IT 259182-45-1P 259182-47-3P 259182-49-5P 259182-51-9P 259182-53-1P
259182-54-2P 259182-55-3P 259182-56-4P 259182-57-5P 259182-58-6P
259182-59-7P 259182-60-0P 259182-61-1P 259182-62-2P 259182-63-3P
259182-64-4P 259182-65-5P 259182-66-6P 259182-67-7P 259182-68-8P
259182-69-9P 259182-70-2P 259182-71-3P 259182-72-4P 259182-73-5P
259182-74-6P 259182-75-7P 259182-76-8P 259182-77-9P 259182-78-0P
259182-79-1P 259182-80-4P 259182-81-5P 259182-82-6P 259182-83-7P
259182-84-8P 259182-85-9P 259182-86-0P 259182-87-1P 259182-88-2P
259182-89-3P 259182-90-6P 259182-91-7P 259182-92-8P 259182-93-9P
259182-94-0P 259182-95-1P 259182-96-2P 259182-97-3P 259182-98-4P
259182-99-5P 259183-00-1P 259183-01-2P 259183-02-3P 259183-03-4P
259183-04-5P 259183-05-6P 259183-06-7P 259183-07-8P 259183-08-9P
259183-09-0P 259183-10-3P 259183-11-4P 259183-12-5P 259183-13-6P
259183-14-7P 259183-15-8P 259183-16-9P 259183-17-0P 259183-18-1P
259183-19-2P 259183-20-5P 259183-21-6P 259183-22-7P 259183-23-8P
259183-24-9P 259183-25-0P 259183-26-1P 259183-27-2P 259183-28-3P
259183-29-4P 259183-30-7P 259183-31-8P 259183-32-9P 259183-33-0P
259183-34-1P 259183-35-2P 259183-36-3P 259183-37-4P 259183-38-5P
259183-39-6P 259183-40-9P 259183-41-0P 259183-42-1P 259183-43-2P
259183-44-3P 259183-45-4P 259183-46-5P 259183-47-6P 259183-48-7P
259183-49-8P 259183-50-1P 259183-51-2P 259183-52-3P 259183-53-4P

259183-54-5P 259183-55-6P 259183-56-7P 259183-57-8P 259183-58-9P
259183-59-0P 259183-60-3P 259183-61-4P 259183-62-5P 259183-63-6P
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259183-69-2P 259183-70-5P 259183-71-6P 259183-72-7P 259183-73-8P
259183-74-9P 259183-75-0P 259183-76-1P 259183-77-2P 259183-78-3P
259183-79-4P 259183-80-7P 259183-81-8P 259183-82-9P 259184-59-3P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

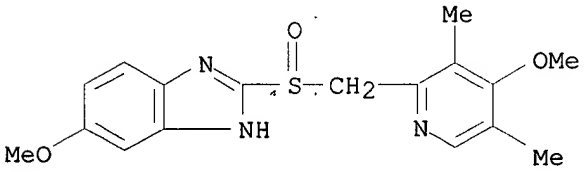
IT 64-10-8, Phenylurea 92-53-5 98-09-9, Benzenesulfonyl chloride 98-60-2, 4-Chlorobenzenesulfonyl chloride 103-83-3, N,N-Dimethylbenzylamine 108-95-2, Phenol, reactions 110-91-8, Morpholine, reactions 121-69-7, N,N-Dimethylaniline, reactions 122-99-6, 2-Phenoxyethanol 588-63-6, 3-Phenoxypropyl bromide 621-88-5, 2-Phenoxyacetamide 636-73-7, Pyridine-3-sulfonic acid 701-99-5, Phenoxyacetyl chloride 814-49-3, Diethyl chlorophosphate 1939-99-7, Phenylmethylsulfonyl chloride 2386-60-9, 1-Butanesulfonyl chloride 2389-73-3 3647-69-6 10147-36-1, 1-Propanesulfonyl chloride 10147-37-2, Isopropylsulfonyl chloride 13468-02-5 14098-44-3 16629-19-9, Thiophene-2-sulfonyl chloride 54187-96-1 69812-29-9 **73590-58-6 103577-45-3 117976-90-6 138786-67-1** 259183-91-0 259183-92-1 259183-93-2
RL: RCT (Reactant)
(prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

IT 3235-36-7P 16133-25-8P, 3-Pyridinesulfonyl chloride 19715-49-2P 29293-93-4P 29488-54-8P 40685-78-7P 69986-21-6P 85576-25-6P 100603-64-3P 100618-57-3P 125393-22-8P 259183-83-0P 259183-84-1P 259183-85-2P 259183-86-3P 259183-87-4P 259183-88-5P 259183-89-6P 259183-90-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

IT 9000-83-3, ATPase
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(prodrugs of the gastric H,K-ATPase **inhibitors**; prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

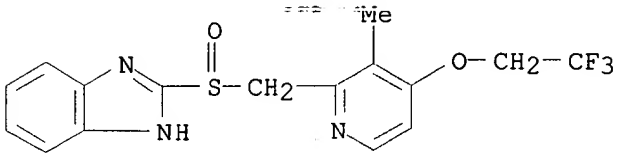
IT **73590-58-6 103577-45-3 117976-90-6 138786-67-1**
RL: RCT (Reactant)
(prepn. of benzimidazole derivs. as prodrugs of **proton pump inhibitors**)

RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

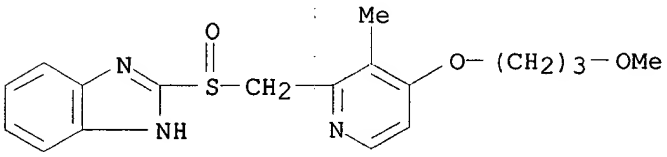


RN 103577-45-3 HCAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

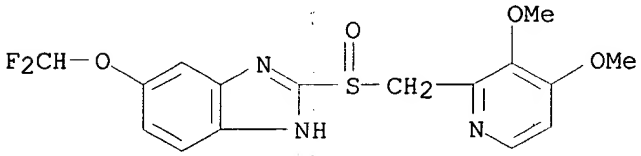


RN 117976-90-6 HCAPLUS
CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 138786-67-1 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)



● Na

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:496282 HCAPLUS
DOCUMENT NUMBER: 131:139259
TITLE: Efficacy and safety of pantoprazole in patients with gastroesophageal reflux disease using an intravenous-oral regimen
AUTHOR(S): Wurzer, H.; Schutze, K.; Bethke, T.; Fischer, R.; Luhmann, R.; Riesenhuber, C.
CORPORATE SOURCE: Medical Department II, General Hospital, Graz, A-8036, Austria
SOURCE: Hepato-Gastroenterology (1999), 46(27), 1809-1815

CODEN: HEGAD4; ISSN: 0172-6390
PUBLISHER: H.G.E. Update Medical Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB BACKGROUND/AIMS: To investigate the efficacy and safety of an i.v.-oral regimen using the gastric proton pump inhibitor pantoprazole. METHODOl.: Outpatients, with endoscopically diagnosed moderate or severe gastro-esophageal reflux disease (GERD stage II and III, resp., Savary-Miller classification), were recruited from ten hospitals or private practice centers and enrolled into an open-labeled study (intention-to-treat population n = 110, age 20-88 yr; per-protocol population n = 98). Patients were treated once daily with 40mg pantoprazole which was administered as an i.v. injection for the initial 5-7 consecutive days, then as a tablet, for up to 8 wk. The efficacy parameters were complete healing of lesions evaluated endoscopically after week 4 and 8, and relief from symptoms assessed after week 2 and 4. RESULTS: Complete healing was achieved in 85/98 (87%) and 93/98 (95%) per-protocol patients, after 4 and 8 wk, resp. The corresponding results for the intention-to-treat population were 85/110 (77%) and 93/110 (85%), resp. After 2 wk of treatment, heartburn, acid regurgitation, and pain on swallowing resolved in 97%, 98%, and 100% of the per-protocol patients, resp. Faster healing was obsd. in non-smokers, those infected with Helicobacter pylori, and those with initial GERD stage II. The i.v. and oral administration phases were well tolerated. CONCLUSIONS: Pantoprazole (40mg), applied as an i.v.-oral regimen to patients with GERD led to fast resoln. of symptoms and high healing rates. For patients, temporarily unable to take oral medications, this regimen offers safe and reliable gastric acid suppression and allows the possibility of changing between the oral and i.v. administration without the need for dose adjustment.

CC 1-9 (Pharmacology)

IT **Antiulcer** agents
(i.v.-oral pantoprazole treatment of humans with gastroesophageal reflux disease)

IT **Drug delivery systems**
(injections, i.v.; i.v.-oral pantoprazole treatment of humans with gastroesophageal reflux disease)

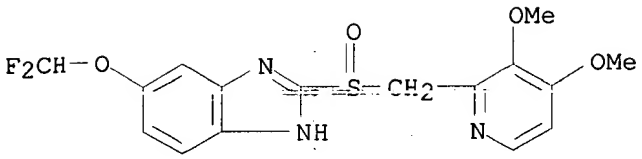
IT Antacids
(**proton pump inhibitors**; i.v.-oral pantoprazole treatment of humans with gastroesophageal reflux disease)

IT **102625-70-7**, Pantoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(i.v.-oral pantoprazole treatment of humans with gastroesophageal reflux disease)

IT **102625-70-7**, Pantoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(i.v.-oral pantoprazole treatment of humans with gastroesophageal reflux disease)

RN 102625-70-7 HCAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:388074 HCAPLUS
DOCUMENT NUMBER: 131:23549
TITLE: Novel suppository form comprising an acid-labile active compound
INVENTOR(S): Linder, Rudolf; Dietrich, Rango
PATENT ASSIGNEE(S): Byk Gulden Lomberg Chemische Fabrik GmbH, Germany
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9929299	A1	19990617	WO 1998-EP7946	19981208
W: AL, AU, BA, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19754324	A1	19990610	DE 1997-19754324	19971208
DE 19822549	A1	19991125	DE 1998-19822549	19980520
AU 9924130	A1	19990628	AU 1999-24130	19981208
EP 1037607	A1	20000927	EP 1998-966609	19981208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001525355	T2	20011211	JP 2000-523971	19981208

PRIORITY APPLN. INFO.: DE 1997-19754324 A 19971208
DE 1998-19822549 A 19980520
WO 1998-EP7946 W 19981208

AB A new administration form for acid-labile active compds. is described. The administration form is a suppository, in particular for rectal administration. Cholesterol 7 g and Ethocel 5 g were dissolved in 100 mL dichloromethane and 5 g pantoprazole sodium sesquihydrate was suspended in the soln. The suspension was spray-dried to give a white free-flowing powder. The powder was introduced to 194.7 g suppository base (Adeps solidus) and the obtained suspension was cast into suppositories of 2.1 g each.

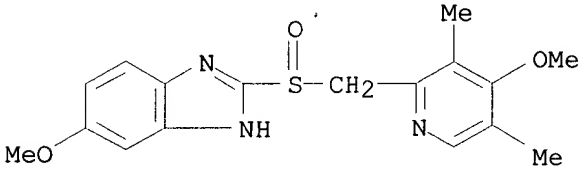
IC ICM A61K009-02
ICS A61K031-44
CC 63-6 (Pharmaceuticals)
ST suppository acid labile **proton pump inhibitor** ; pantoprazole cholesterol Ethocel suppository
IT **Antiulcer** agents
(suppositories contg. acid-labile drug particles surrounded with sterols and polymers and/or fatty alcs.)

IT **Drug delivery systems**
(suppositories; suppositories contg. acid-labile **drug** particles surrounded with sterols and polymers and/or fatty alcs.)

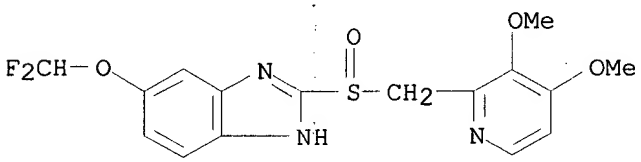
IT 57-87-4, Ergosterol 57-88-5, Cholesterol, biological studies 79-63-0, Lanosterol 83-46-5 83-48-7, Stigmasterol 112-72-1, Myristyl alcohol 112-92-5, Stearyl alcohol 474-62-4, Campesterol 474-67-9, Brassicasterol 9003-20-7, Polyvinyl acetate 9003-39-8, Polyvidone 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-67-5, Methyl cellulose 25086-89-9, Vinylacetate-vinylpyrrolidone copolymer 36653-82-4, Cetyl alcohol **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole **164579-32-2**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(suppositories contg. acid-labile drug particles surrounded with sterols and polymers and/or fatty alcs.)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **164579-32-2**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(suppositories contg. acid-labile drug particles surrounded with sterols and polymers and/or fatty alcs.)

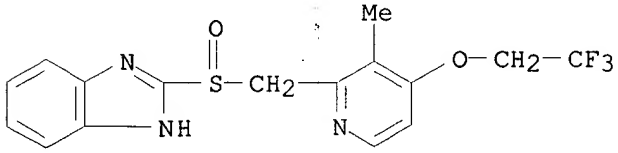
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

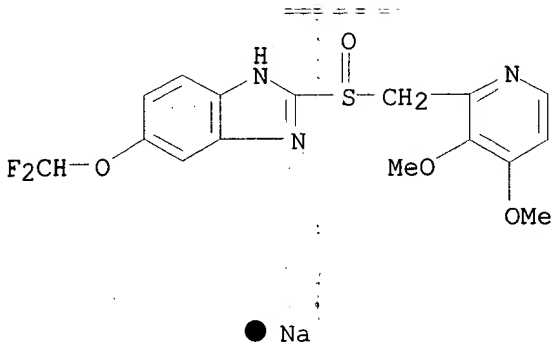


RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 164579-32-2 HCAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (2:3) (9CI) (CA INDEX NAME)



● Na

●3/2 H_2O

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:172610 HCAPLUS
DOCUMENT NUMBER: 130:213643
TITLE: Combined preparations for treating upper gastrointestinal tract distress
INVENTOR(S): Mitra, Sekhar; Desai, Kishorkumar Jivanlal
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9910000	A1	19990304	WO 1998-IB1205	19980806
W: AU, CA, CN, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9883544	A1	19990316	AU 1998-83544	19980806
JP 2001513570	T2	20010904	JP 2000-507390	19980806

PRIORITY APPLN. INFO.: US 1997-917993 A 19970825
WO 1998-IB1205 W 19980806

AB Multilayer combined prepns. for oral administration to be used for disorders of the upper gastrointestinal tract, such as heartburn, indigestion or H. pylori infections is disclosed. The preferred form is a tablet which releases a bismuth compd. in the stomach and a proton pump inhibiting compd. into the intestine. This is achieved by making an enteric coated core contg. the proton pump inhibitor with an outer layer contg. the bismuth compd. A multilayered tablet contained bismuth subsalicylate cake 262.5, calcium carbonate 67.5, mannitol 67.5, color 0.70, povidone 13.50, magnesium stearate 5.40, microcryst. cellulose 213.4, sodium starch glycolate 40.3, Polysorbate 80 3.4, colloidal silicon

dioxide 0.7 in the core layer, microcryst. cellulose 200.00 in the center layer, omeprazole 10, and microcryst. cellulose in the final layer.

IC ICM A61K033-24
ICS A61K009-20; A61K031-415

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

ST **proton pump inhibitor** bismuth salt stomach; multilayer pharmaceutical tablet bismuth subsalicylate omeprazole

IT **Antiulcer** agents
Capsules (**drug delivery systems**)
Gastrointestinal tract
(combined prepns. for treating upper gastrointestinal tract distress)

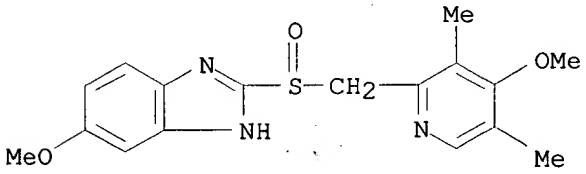
IT Tablets (**drug delivery systems**)
(enteric-coated; combined prepns. for treating upper gastrointestinal tract distress)

IT Tablets (**drug delivery systems**)
(multilayered; combined prepns. for treating upper gastrointestinal tract distress)

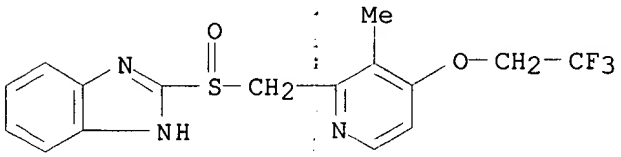
IT 99-26-3, Bismuth subgallate 813-93-4, Bismuth citrate 1304-85-4, Bismuth subnitrate 1344-85-0, Bismuth aluminate 5892-10-4, Bismuth subcarbonate 6591-56-6, Bismuth tartrate 14882-18-9, Bismuth subsalicylate 57644-54-9, Tripotassium dicitratobismuthate **73590-58-6**, Omeprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined prepns. for treating upper gastrointestinal tract distress)

IT **73590-58-6**, Omeprazole **103577-45-3**, Lansoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined prepns. for treating upper gastrointestinal tract distress)

RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:68147 HCAPLUS

DOCUMENT NUMBER: 130:246749
TITLE: Classification of dyspepsia: identification of independent symptom components in 7270 consecutive, unselected dyspepsia patients from general practice
AUTHOR(S): Meineche-Schmidt, V.; Christensen, E.
CORPORATE SOURCE: Dept. of General Practice, The Panum Institute, and Clinic of Internal Medicine I, Bispebjerg University Hospital, Copenhagen, Den.
SOURCE: Scand. J. Gastroenterol. (1998), 33(12), 1262-1272
CODEN: SJGRA4; ISSN: 0036-5521
PUBLISHER: Scandinavian University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several attempts to classify dyspepsia into subgroups have been proposed as a basis for empirical treatment and research. However, subgrouping has proved difficult due to overlap of symptoms between subgroups, and the response to empirical therapy is difficult to predict. We aimed to study whether natural symptom combinations occur in patients seeing general practitioners because of dyspepsia and whether symptom presentation could predict the effect of proton pump inhibitor treatment. The symptom presentation of 7270 consecutive, unselected patients with dyspepsia in general practice was studied by using principal-components anal. The relation to the effect of omeprazole was studied in a subsample (n= 471) with predominantly reflux-like or ulcer-like dyspepsia being included in a controlled clin. trial of omeprazole vs. placebo. Four principal components (factors), explaining 36% of the total variance, were found. They describe four independent dimensions in the symptoms of dyspepsia that can be interpreted meaningfully as representing A) acid-related disease of the upper gastrointestinal tract, B) irritable bowel disorder, C) dysmotility of the stomach/duodenum, and D) dysmotility of the esophagus. In the subsample the response to proton pump inhibition therapy was assocd. with high component-A scores, low component-B scores, and low component-C scores. A pocket chart was devised to obtain the component scores easily in new patients. The anal. identified four characteristic, biol. meaningful dyspepsia components that express independent dimensions in the symptoms of patients with dyspepsia. The symptom scores corresponding to the four components may improve symptom-based diagnosis and thereby empirical therapy. In particular, the assocn. between component scores and the effect of omeprazole suggests that classifying dyspepsia on the basis of these components may focus empirical omeprazole therapy even more.

CC 1-9 (Pharmacology)
Section cross-reference(s): 14

ST dyspepsia symptom identification **proton pump inhibitor** therapy; antacid dyspepsia symptom identification

IT Antacids
Antiulcer agents
Dyspepsia
(classification of dyspepsia: identification of independent symptom components in 7270 consecutive, unselected dyspepsic **human** patients from general practice)

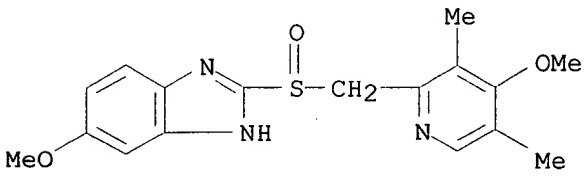
IT **73590-58-6**, Omeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(classification of dyspepsia: identification of independent symptom components in 7270 consecutive, unselected dyspepsic **human** patients from general practice)

IT **73590-58-6**, Omeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(classification of dyspepsia: identification of independent symptom components in 7270 consecutive, unselected dyspepsic **human** patients from general practice)

RN 73590-58-6 HCAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:29191 HCAPLUS

DOCUMENT NUMBER: 130:71460

TITLE: **Proton pump inhibitors.** Active substance release from different preparations

AUTHOR(S): Petersen, Karl-Uwe; Schmutzler, Wolfgang

CORPORATE SOURCE: Aachen, D-52072, Germany

SOURCE: Dtsch. Apoth. Ztg. (1999), 139(1), 64-65
CODEN: DAZEA2; ISSN: 0011-9857

PUBLISHER: Deutscher Apotheker Verlag

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Tablet and capsule prepns. of the proton pump inhibitors lansoprazole (Agopton capsules), omeprazole (Antra capsules and Antra Multiple Unit Pellet System), and pantoprazole (Pantoprazol tablets) were tested in vitro. After 30 min incubation (pH = 6.8) 80% of omeprazole were released from tablets and capsules compared to 20% of pantoprazole from tablets; 80% of omeprazole were released from micropellet tablets (Antra MUPS) compared to 40% from lansoprazole capsules.

CC 63-6 (Pharmaceuticals)

ST **proton pump inhibitor** pharmacokinetics bioequivalence; omeprazole lansoprazole pantoprazole pharmacokinetics bioequivalence; tablet capsule omeprazole lansoprazole pantoprazole **antiulcer**

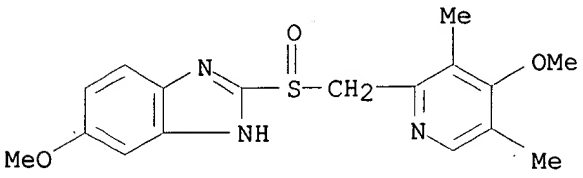
IT **Antiulcer** agents
Capsules (**drug delivery systems**)
Tablets (**drug delivery systems**)
(**proton pump inhibitors** releasing from different prepns.)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**proton pump inhibitors** releasing from different prepns.)

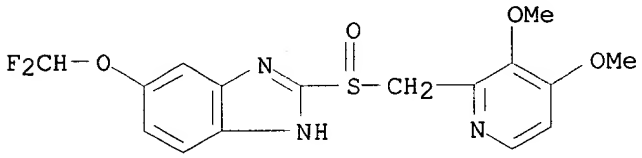
IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(**proton pump inhibitors** releasing from different prepns.)

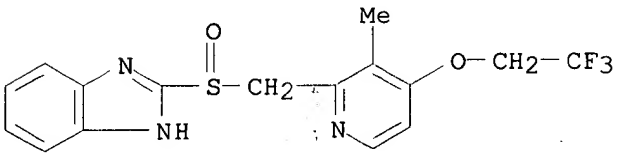
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

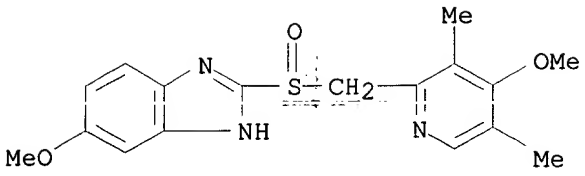
L41 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:621099 HCAPLUS
DOCUMENT NUMBER: 129:235661
TITLE: An enteric-coated oral dosage form comprising sodium amoxycillin
INVENTOR(S): Wendsjo, Stig
PATENT ASSIGNEE(S): Astra Aktiebolag (Publ), Swed.
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9840054 A1 19980917 WO 1998-SE356 19980227
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9864268 A1 19980929 AU 1998-64268 19980227
EP 981335 A1 20000301 EP 1998-909899 19980227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2001515489 T2 20010918 JP 1998-539498 19980227
PRIORITY APPLN. INFO.: SE 1997-885 A 19970312
WO 1998-SE356 W 19980227

AB An enteric-coated oral dosage form comprising sodium amoxycillin, wherein the dosage form is a single unit tableted dosage form or a multiple unit tableted dosage form is claimed. Processes for the manuf. of the dosage forms as well as the formulations, use in the treatment of Helicobacter pylori infections are claimed. A tablet was formulated contg. Na amoxycillin 224, microcryst. cellulose 245, Na starch glycolate 75, PVP 38, and Mg stearate 8.4 mg and coated with a soln. for sepg. layer contg. hydroxypropyl Me cellulose, H2O2, and water, followed by a soln. for enteric coating layer contg. methacrylate copolymer dispersion, polyethylene glycol, titania, and water.

IC ICM A61K009-28
ICS A61K009-52; A61K031-44
CC 63-6 (Pharmaceuticals)
IT **Antiulcer** agents
(enteric-coated tablets contg. sodium amoxycillin and **proton pump inhibitors**)
IT Tablets (**drug delivery systems**)
(enteric-coated; enteric-coated tablets contg. sodium amoxycillin and **proton pump inhibitors**)
IT Helicobacter pylori
(infections, treatment of; enteric-coated tablets contg. sodium amoxycillin and **proton pump inhibitors**)
IT 34642-77-8, Sodium amoxycillin **73590-58-6**, Omeprazole 119141-88-7, S-Omeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric-coated tablets contg. sodium amoxycillin and **proton pump inhibitors**)
IT **73590-58-6**, Omeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric-coated tablets contg. sodium amoxycillin and **proton pump inhibitors**)
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:478330 HCAPLUS
DOCUMENT NUMBER: 129:225302
TITLE: An evaluation of the cytochrome P450 induction potential of pantoprazole in primary **human** hepatocytes
AUTHOR(S): Masubuchi, Noriko; Li, Albert P.; Okazaki, Osamu
CORPORATE SOURCE: Drug Metabolism and Analytical Chemistry Research Laboratory, Daiichi Pharmaceutical, Tokyo, 134, Japan
SOURCE: Chem.-Biol. Interact. (1998), 114(1,2), 1-13
CODEN: CBINA8; ISSN: 0009-2797
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Primary human hepatocytes contain a full complement of human drug-metabolizing enzymes and therefore represent a relevant exptl. system for the evaluation of pharmacokinetic drug-drug interaction potential in human. In this study, the cytochrome P 450 (CYP) induction potential of pantoprazole (PAN) was evaluated and compared to two other proton pump inhibitors (PPIs), omeprazole (OM) and lansoprazole (LAN). Primary human hepatocytes from three donors were studied. The hepatocytes were cultured for 3 days, followed by treatment for 3 days with the PPIs at 2, 5 and 10 .mu.M. Two other known CYP inducers, 3-methylcholanthrene at 1 .mu.M and rifampin at 50 .mu.M, were also evaluated. Induction potentials of these chems. for CYP1A and CYP3A were evaluated by isoenzyme activity and isoenzyme content. 7-Ethoxyresorufin-O-deethylase and testosterone 6.beta.-hydroxylase activities were used as endpoints for CYP1A and CYP3A, resp. Isoenzyme protein contents of CYP1A and CYP3A were evaluated via Western blotting. The results showed that for CYP1A induction, the rank ordering in induction potential was consistently OM>LAN>PAN. CYP3A induction by the PPI's were obsd. in two of the three hepatocyte cultures, with no apparent differences in induction potency for the three compds. Our results on CYP1A induction suggest that PAN has a lower drug-drug interaction potential than OM and LAN.

CC 1-4 (Pharmacology)
ST **proton pump inhibitor** hepatocyte cytochrome P450; drug interaction potential **antiulcer** drug
IT **Antiulcer** agents
Hepatocyte
(cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes: comparison with 3-methylcholanthrene, rifampin, omeprazole and lansoprazole)
IT Drug interactions
(potential; cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes: comparison with 3-methylcholanthrene, rifampin, omeprazole and lansoprazole)
IT **102625-70-7**, Pantoprazole
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(cytochrome P 450 induction potential of pantoprazole in primary

human hepatocytes)

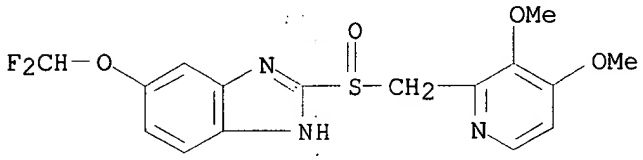
IT 9035-51-2, Cytochrome P450, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes)

IT 56-49-5, 3-Methylcholanthrene 13292-46-1, Rifampin **73590-58-6**, Omeprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes: comparison with 3-methylcholanthrene, rifampin, omeprazole and lansoprazole)

IT 9075-83-6, Testosterone 6.beta.-hydroxylase 59793-97-4, 7-Ethoxyresorufin-O-deethylase
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes: comparison with 3-methylcholanthrene, rifampin, omeprazole and lansoprazole)

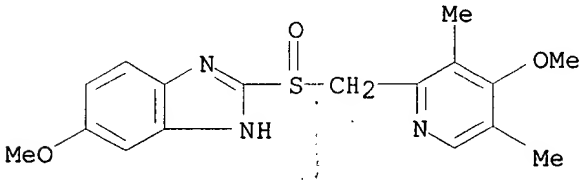
IT **102625-70-7**, Pantoprazole
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes)

RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

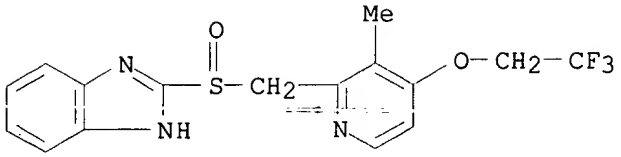


IT **73590-58-6**, Omeprazole **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(cytochrome P 450 induction potential of pantoprazole in primary **human** hepatocytes: comparison with 3-methylcholanthrene, rifampin, omeprazole and lansoprazole)

RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:259529 HCAPLUS
DOCUMENT NUMBER: 128:312928
TITLE: Pharmaceutical compositions for Helicobacter pylori-related gastritis and gastric **ulcer**
INVENTOR(S): Hirata, Takeo; Nakao, Masafumi; Watanbe, Masazumi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10109942	A2	19980428	JP 1997-216083	19970811

PRIORITY APPLN. INFO.: JP 1996-213370 19960813

AB Effective pharmaceutical compns. for H. pylori-related gastritis and gastric ulcer comprise : (A) H. pylori-inhibiting medicinal plant exts. or powders and (B) histamine H2 receptor antagonists, proton pump inhibitors, mucosa-type gastritis and peptic ulcer inhibitors, and/or diarrhea inhibitors.

IC ICM A61K035-78
ICS A61K035-78; A61K031-12; A61K031-165; A61K031-34; A61K031-415; A61K031-425; A61K031-44; A61K031-70; A61K045-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 11
ST pharmaceutical Helicobacter gastritis gastric **ulcer**
IT Forsythia
(fruits; pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)
IT Diarrhea
(inhibitors; pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)
IT Plant (Embryophyta)
(medicinal; pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)
IT **Antiulcer** agents
(peptic; pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)
IT Aconitum carmichaelii
Aloe (genus)
Arctium lappa
Areca
Artemisia capillaris
Carthamus
Cimicifuga
Clove (Syzygium aromaticum)
Coptis
Cork tree (Phellodendron)

Corydalis
Cyperus
Gastritis
Ginger
Granules (**drug delivery systems**)
Hawthorn (Crataegus)
Helicobacter pylori
Honeysuckle (Lonicera japonica)
H2 receptor antagonists
Licorice (Glycyrrhiza)
Lindera strychnifolia
Lotus (genus)
Peony (Paeonia)
Peptic **ulcer**
Perilla
Pomegranate
Rhubarb (Rheum)
Sage (Salvia miltiorhiza)
Senna (Cassia)
Sophora
Tablets (**drug delivery systems**)
(pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)

IT Tannins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)

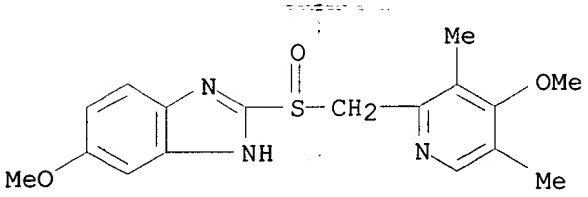
IT **Proton** transport (biological)
(**proton pump inhibitors**; pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)

IT Citrus
(unshiu peel; pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)

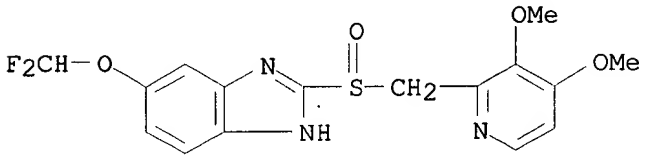
IT 56-40-6, Aminoacetic acid, biological studies 99-26-3, Bismuth subgallate 144-55-8, Sodium bicarbonate, biological studies 471-34-1, Calcium carbonate, biological studies 1304-85-4, Bismuth subnitrate 1309-48-4, Magnesium oxide, biological studies 1327-43-1, Magnesium silicate aluminate 1335-30-4, Aluminum silicate 2090-64-4, Magnesium bicarbonate 5892-10-4, Bismuth subcarbonate 6620-60-6, Proglumide 6809-52-5, Teprenone 7460-14-2, Bismuth salicylate 7757-93-9, Calcium hydrogen phosphate 12304-65-3, Hydrotalcite 13682-92-3, Dihydroxyaluminum aminoacetate 21645-51-2, Aluminum hydroxide, biological studies 27724-96-5, Cetraxate hydrochloride 39366-43-3, Aluminum Magnesium hydroxide 51481-61-9, Cimetidine 54182-58-0, Sucralfate 64218-02-6, Plaunotol 64506-49-6, Sofalcone 66357-35-5, Ranitidine **73590-58-6**, Omeprazole 76824-35-6, Famotidine 76963-41-2, Nizatidine 78273-80-0, Roxatidine 78718-52-2, Benexate 84504-69-8, Irsogladine maleate 86408-72-2, Ecabet sodium 90098-04-7, Rebamipide **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole 107667-60-7, Polaprezinc 117976-89-3, Rabeprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. for Helicobacter pylori-related gastritis and peptic **ulcer**)

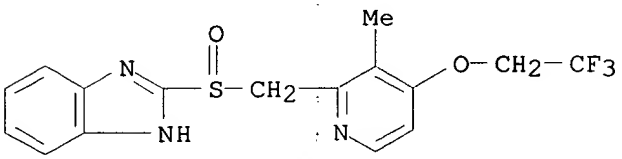
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



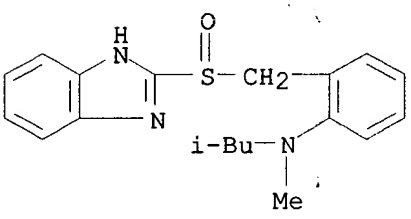
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 104340-86-5 HCAPLUS
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)



L41 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:745956 HCAPLUS
DOCUMENT NUMBER: 128:30403
TITLE: Bismuth salts of sialyloligosaccharides and a method for treating and inhibiting gastric and duodenal **ulcers** using them

INVENTOR(S): Swarz, Herbert
PATENT ASSIGNEE(S): Neose Technologies, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9741875	A1	19971113	WO 1997-US6376	19970428
W: AU, CA, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2253913	AA	19971113	CA 1997-2253913	19970428
AU 9727326	A1	19971126	AU 1997-27326	19970428
AU 710576	B2	19990923		
EP 918526	A1	19990602	EP 1997-921225	19970428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000509714	T2	20000802	JP 1997-539929	19970428
KR 2000010732	A	20000225	KR 1998-708842	19981102

PRIORITY APPLN. INFO.: US 1996-16765 P 19960503
WO 1997-US6376 W 19970428

AB A method for treating and/or inhibiting gastric and duodenal ulcers comprises administering a pharmaceutical compn. comprising a bismuth salt of an oligosaccharide (NeuAc-.alpha.(2-3)-pGal-.beta.(1)-(X)m-(Y)n-)p-Z, (X = bond or group capable of linking pGal to either linking group Y or multivalent support Z; C1 glycosidic O of galactose may be replaced by N, S, C; Y = linking group; Z = multivalent support; m, n = 0, 1; p = 2-1000) is described. Also described is a method for treating and/or inhibiting gastric and duodenal ulcers, comprising administering a pharmaceutical compn. comprising a bismuth salt of an oligosaccharide NeuAc-.alpha.(2-3)-pGal-.beta.(1)-A (A = group capable of bonding to pGal; C1 glycosidic O of galactose may be replaced by N, S, C).

IC ICM A61K031-70
ICS A61K031-715; A61K033-24

CC 1-9 (Pharmacology)
Section cross-reference(s): 63

ST sialyloligosaccharide bismuth salt **ulcer** inhibitor; gastric **ulcer** inhibitor sialyloligosaccharide bismuth salt; duodenal **ulcer** inhibitor sialyloligosaccharide bismuth salt

IT Duodenum
(H. pylori infection; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)

IT Lewis blood groups
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Leb, Leb active oligosaccharide; sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)

IT Liposomes (**drug delivery systems**)
(conjugates with sialyloligosaccharide bismuth salts; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)

IT Dendritic polymers
Polyhydric alcohols
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates with sialyloligosaccharide bismuth salts; sialyloligosaccharide bismuth salts for gastric and duodenal

ulcer treatment)
IT Avidins
Lipids, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates, with sialyloligosaccharide bismuth salts; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT **Antiulcer** agents
(duodenal; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT **Drug delivery systems**
(enteric; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT Stomach diseases
(infection, H. pylori; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT Proton transport (biological)
(inhibitors; sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)
IT Emulsions
(lipid, conjugates with sialyloligosaccharide bismuth salts; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT **Antiulcer** agents
Drug delivery systems
Helicobacter pylori
Oral **drug delivery systems**
(sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT Fetuins
Sialooligosaccharides
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT Antibacterial agents
H2 receptor antagonists
(sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)
IT Antibiotics
Oligosaccharides, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)
IT Infection
(stomach, H. pylori; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT Polysaccharide conjugates
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with sialyloligosaccharide bismuth salts; sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)
IT 12408-02-5, Hydrogen ion, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**proton pump inhibitors**; sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)
IT 63-42-3, Lactose 7440-69-9D, Bismuth, salts with sialyloligosaccharides

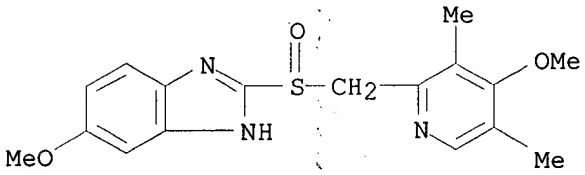
9003-05-8D, Polyacrylamide, conjugates with sialyloligosaccharide bismuth salts 9004-54-0D, Dextran, conjugates with sialyloligosaccharide bismuth salts 12619-70-4D, Cyclodextrin, conjugates with sialyloligosaccharide bismuth salts 25104-18-1D, Polylysine, conjugates with sialyloligosaccharide bismuth salts 35890-38-1, 3'-Sialyllactose 35890-38-1D, 3'-Sialyllactose, albumin conjugates 35890-39-2, 6'-Sialyllactose 38000-06-5D, Polylysine, conjugates with sialyloligosaccharide bismuth salts 199612-73-2
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialyloligosaccharide bismuth salts for gastric and duodenal **ulcer** treatment)

IT 60-54-8D, Tetracycline, derivs. 66357-35-5, Ranitidine **73590-58-6**, Omeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)

IT **73590-58-6**, Omeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialyloligosaccharide bismuth salts, alone or with other agents, for gastric and duodenal **ulcer** treatment)

RN 73590-58-6 HCAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:31678 HCAPLUS

DOCUMENT NUMBER: 126:83946

TITLE: Lansoprazole: a **proton pump inhibitor**

AUTHOR(S): Garnett, William R.

CORPORATE SOURCE: Medical College Virginia, Virginia Commonwealth University, Richmond, VA, 23298, USA

SOURCE: Ann. Pharmacother. (1996), 30(12), 1425-1436
CODEN: APHRER; ISSN: 1060-0280

PUBLISHER: Harvey Whitney Books Co.

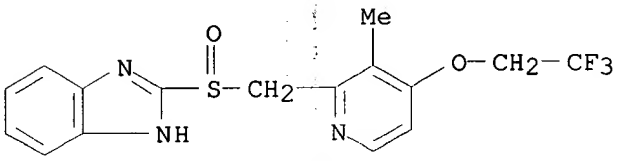
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review, with 108 refs., summarizing published data on lansoprazole, a proton pump inhibitor approved by the Food and Drug Administration for use in the treatment of duodenal ulcer, erosive esophagitis, and pathol. hypersecretory conditions (e.g., Zollinger-Ellison syndrome). Lansoprazole is safe and effective for the treatment of acid-related disorders. It is more effective than the H2-receptor antagonists and comparable to omeprazole for these indications. The choice between lansoprazole and omeprazole is likely to be institution-specific and pharmacoeconomic.

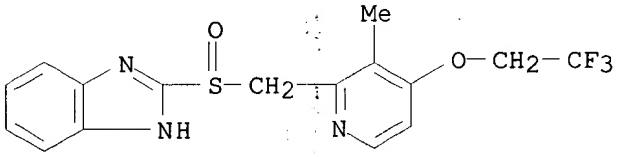
CC 1-0 (Pharmacology)

IT Pancreatic tumors
(Zollinger-Ellison syndrome; lansoprazole treatment of **human**)
IT Esophageal diseases
(esophagitis; lansoprazole treatment of **human**)
IT Duodenal **ulcer**
(lansoprazole treatment of **human**)
IT **103577-45-3**, Lansoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmacol. of)
IT **103577-45-3**, Lansoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmacol. of)
RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:395709 HCAPLUS
DOCUMENT NUMBER: 122:178093
TITLE: Uptake site of lansoprazole, a **proton pump inhibitor**, in **human** fundic mucosa: possible relevance with fibroblast and Helicobacter pylori
AUTHOR(S): Nakamura, Masahiko; Oda, Masaya; Akiba, Yasutada; Inoue, Jun; Ito, Takashi; Fujiwara, Tatsushi; Tsuchiya, Masaharu; Ishii, Hiromasa
CORPORATE SOURCE: School Medicine, Keio University, Tokyo, 160, Japan
SOURCE: Cell. Mol. Biol. (Paris) (1995), 41(1), 125-30
CODEN: CMOBEF; ISSN: 0145-5680
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To clarify the mechanism of the effect of lansoprazole in healing gastric ulcers, the uptake sites of lansoprazole were studied using endoscopically biopsied specimens from the margin of the gastric ulcer. The specimens were incubated in a medium contg. 3H-lansoprazole for 5 or 15 min., post-fixed with 1% osmic acid and embedded in Epon. Semi-thin or ultra-thin sections were made and radioautog. emulsion films were applied by the wire-loop method. 30 Days after incubation, the sections were developed, fixed and obsd. by light and electron microscopy. The uptake sites of lansoprazole were accumulated on the fibroblasts located near the tip portion of the gastric mucosa and on the unmyelinated nerve fibers as well as on the parietal cells. Some of the uptake sites were also obsd. near the plasma membrane of the bacteria in the gastric lumen. These observations suggest that the activity of lansoprazole was exerted partly through effects on both the mesenchymal cells and the Helicobacter pylori bacteria.

CC 1-9 (Pharmacology)
ST lansoprazole stomach **ulcer** healing mechanism; **proton pump inhibitor ulcer** healing mechanism
IT Campylobacter pyloridis
Fibroblast
Ulcer inhibitors
(uptake sites of lansoprazole on fibroblasts and Helicobacter pylori in relation to **antiulcer** activity)
IT Biological transport
(absorption, uptake sites of lansoprazole on fibroblasts and Helicobacter pylori in relation to **antiulcer** activity)
IT Nerve
(enteric, uptake sites of lansoprazole on nerve cells and parietal cells in relation to **antiulcer** activity)
IT Stomach
(parietal cell, uptake sites of lansoprazole on nerve cells and parietal cells in relation to **antiulcer** activity)
IT **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(uptake sites of lansoprazole on fibroblasts and Helicobacter pylori in relation to **antiulcer** activity)
IT **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(uptake sites of lansoprazole on fibroblasts and Helicobacter pylori in relation to **antiulcer** activity)
RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L41 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:503980 HCAPLUS
DOCUMENT NUMBER: 117:103980
TITLE: Pathogenesis and therapy of peptic **ulcer** observed by consecutive intragastric pH monitoring
AUTHOR(S): Murakami, Yoshiko; Matsumoto, Nori; Kawamoto, Yuji; Suenaga, Toshiaki; Shirakawa, Toshio; Inoue, Masaki; Kajiyama, Goro; Yokoya, Hitoshi; Nakamura, Michio
CORPORATE SOURCE: Sch. Med., Hiroshima Univ., Japan
SOURCE: Ther. Res. (1992), 13(Suppl. 1), 58-64
CODEN: THREEL; ISSN: 0289-8020
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Consecutive intragastric pH monitoring was conducted on cases of gastric ulcer and duodenal ulcer for the purpose of studying the pathogenesis and therapy of these diseases. In cases of duodenal ulcer, 84% of the cases did not show nocturnal intragastric pH inversion, while in cases of

gastric ulcer, about half of the cases showed nocturnal intragastric pH inversion. The elevation of intragastric pH during the night by the administration of a common dose of H2-blocker was shorter in cases of H2-blocker-resistant ulcer than in cases of non-resistant ulcer. The intragastric pH during the day in cases of H2-blocker-resistant ulcer which did not heal by the administration of a common dose of H2-blocker was higher than in cases of H2-blocker-resistant ulcer which could be successfully healed by administration of a larger dose or a different kind of H2-blocker. Proton pump inhibitor was found to be more adequately effective in inhibiting postprandial gastric acid secretion than H2-blocker. The results suggested that the absence of nocturnal intragastric pH inversion is an important factor in the development of duodenal ulcer and that insufficient acid inhibition during the day is a factor involved in intractability of gastric ulcer and duodenal ulcer. Intragastric pH monitoring is considered to be a useful examn. in observing gastric acid secretion and in selecting drugs to be administered in prospective therapy of individual cases.

CC 1-9 (Pharmacology)
Section cross-reference(s): 14

ST stomach duodenum **ulcer** treatment intragastric pH

IT **Ulcer**
(pathogenesis and treatment of **human**, consecutive intragastric pH monitoring in)

IT Antihistaminics
(H2, duodenal and gastric **ulcer** treatment with, intragastric pH monitoring in, in humans)

IT Intestine, disease
(duodenum, **ulcer**, pathogenesis and treatment of **human**, consecutive intragastric pH monitoring in)

IT Rhythm, biological
(nocturnal, of gastric acid secretion, intragastric pH monitoring of, in pathogenesis and treatment of peptic **ulcer** in humans)

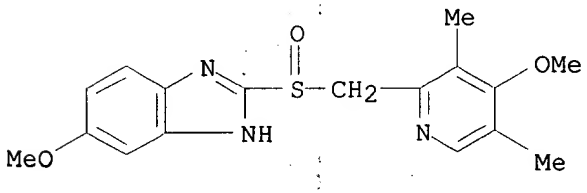
IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine **73590-58-6**, Omeprazole 76824-35-6, Famotidine **117976-90-6**, E 3810
RL: BIOL (Biological study)
(duodenal and gastric **ulcer** treatment with, intragastric pH monitoring in, in humans)

IT 12586-59-3, **Proton**
RL: BIOL (Biological study)
(**pump inhibitors**, duodenal and gastric **ulcer** treatment with, intragastric pH monitoring in, in humans)

IT **73590-58-6**, Omeprazole **117976-90-6**, E 3810
RL: BIOL (Biological study)
(duodenal and gastric **ulcer** treatment with, intragastric pH monitoring in, in humans)

RN 73590-58-6 HCAPLUS

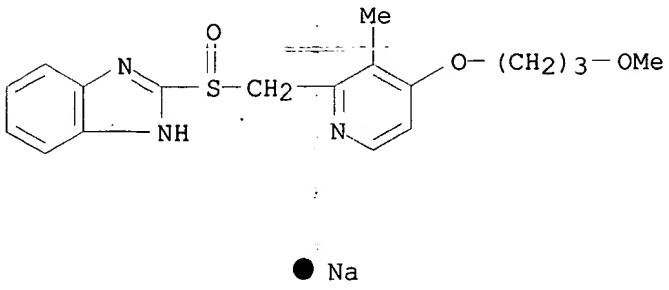
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 117976-90-6 HCAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-

pyridinyl]methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

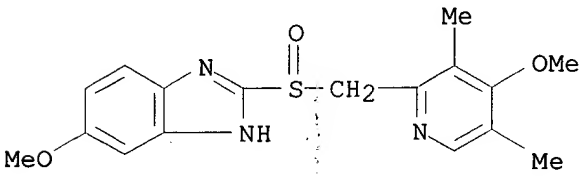


L41 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:120700 HCAPLUS
DOCUMENT NUMBER: 116:120700
TITLE: Effects of **proton pump inhibitor** on gastric mucosa hemodynamics and tissue **oxygenation** in anesthetized rats
AUTHOR(S): Kawano, Sunao; Tanimura, Hirohisa; Sato, Nobuhiro; Tsuji, Shingo; Takei, Yoshiyuki; Ogihara, Tatsuo; Nagano, Kouichi; Fusamoto, Hideyuki; Kamada, Takenobu
CORPORATE SOURCE: Med. Sch., Osaka Univ., Osaka, 553, Japan
SOURCE: Eur. J. Pharmacol. (1992), 211(1), 55-60
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Proton pump inhibitors have been reported to have a cytoprotective action in addn. to the anti-secretory action of acid. The precise mechanism, however, remains obscure. In this study, the effects of proton pump inhibitors (omeprazole and NC 1300) on gastric mucosa hemodynamics and tissue **oxygenation** were investigated using organ reflectance spectrophotometry in a hemorrhagic shock-reperfusion model involving anesthetized rats. Neither drug affected gastric mucosa hemodynamics nor tissue **oxygenation** in the basal state before hemorrhage. During the hemorrhagic shock state, however, these drugs maintained tissue **oxygenation** and reduced ulcer formation, although they did not show a significant effect on gastric mucosa blood vol. The results suggest that both proton pump inhibitors have an anti-ulcer action by maintaining mucosal **oxygenation** in addn. to the anti-secretory activity of acid.

CC 1-9 (Pharmacology)
ST **antiulcer proton pump inhibitor** gastric mucosa; circulation gastric mucosa **proton pump inhibitor**
IT Circulation
Oxygenation
(of gastric mucosa, in hemorrhagic shock, **proton pump inhibitors** effect on, **ulcer inhibition** in relation to)
IT **Ulcer inhibitors**
(**proton pump inhibitors**, circulation and **oxygenation** of gastric mucosa response to, in hemorrhagic shock)
IT Shock
(hemorrhagic, **ulcer** inhibitors effect on gastric mucosa **oxygenation** and circulation in)

IT Stomach, toxic chemical and physical damage
(mucosa, circulation and **oxygenation** of, in hemorrhagic shock, **proton pump inhibitors** effect on, **ulcer inhibition** in relation to)
IT **73590-58-6**, Omeprazole 100924-68-3, NC-1300
RL: BIOL (Biological study)
(gastric mucosa circulation and **oxygenation** response to, in hemorrhagic shock, **antiulcer** mechanism in relation to)
IT **73590-58-6**, Omeprazole
RL: BIOL (Biological study)
(gastric mucosa circulation and **oxygenation** response to, in hemorrhagic shock, **antiulcer** mechanism in relation to)
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L43 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:565915 HCAPLUS
DOCUMENT NUMBER: 131:165295
TITLE: Antimicrobial compositions with synergistic effect, drugs and remedies for digestive diseases containing the same, process for the production thereof and preparations associated therewith
INVENTOR(S): Fujii, Kenji; Yamashita, Katsuji; Hosoe, Kazunori; Hidaka, Takayoshi
PATENT ASSIGNEE(S): Kaneka Corporation, Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9943327	A1	19990902	WO 1999-JP717	19990217
W: CA, JP, KR, US				
RW: BE, CH, DE, ES, FR, GB, IT				
EP 1057487	A1	20001206	EP 1999-905227	19990217
R: BE, CH, DE, ES, FR, GB, IT, LI				

PRIORITY APPLN. INFO.: JP 1998-42418 A 19980224
WO 1999-JP717 W 19990217

AB Antimicrobial compns. contg. (1) a rifamycin deriv. represented by formula (I) or a physiol. acceptable salt thereof, and (2) (a) a proton pump inhibitor or (b) a bismuth prepn., wherein the components (1) and (2) are used in such amts. as to achieve a synergistic effect. These compns. can be administered to patients with digestive diseases induced by the

infection with Helicobacter pylori in a small dose and at a low administration frequency compared with the cases of the conventional remedies.

IC ICM A61K031-535
ICS A61K031-54; A61K045-00; A61K031-44; A61K031-60; C07D498-18; C07E513-18

CC 1-5 (Pharmacology)
Section cross-reference(s): **63**

ST antimicrobial rifamycin synergistic remedy digestive disease; bismuth prepn antimicrobial rifamycin **antiulcer; proton pump inhibitor** antimicrobial rifamycin **antiulcer**

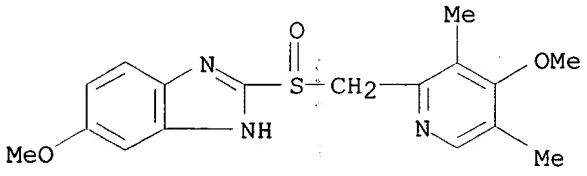
IT **Antiulcer** agents
Helicobacter pylori
(antimicrobial compns. contg. rifamycin derivs. with synergistic effect, drugs and remedies for digestive diseases contg. the same, process for the prodn. thereof and prepns. assocd. therewith)

IT 813-93-4, Bismuth citrate 6998-60-3D, Rifamycin, derivs. 7460-14-2, Bismuth salicylate **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimicrobial compns. contg. rifamycin derivs. with synergistic effect, drugs and remedies for digestive diseases contg. the same, process for the prodn. thereof and prepns. assocd. therewith)

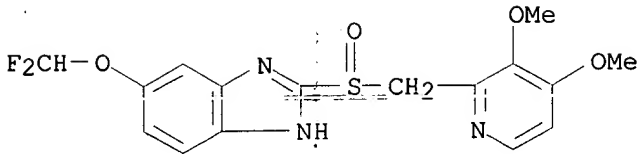
IT 12586-59-3, **Proton**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(**pump inhibitors**; antimicrobial compns. contg. rifamycin derivs. with synergistic effect, drugs and remedies for digestive diseases contg. the same, process for the prodn. thereof and prepns. assocd. therewith)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimicrobial compns. contg. rifamycin derivs. with synergistic effect, drugs and remedies for digestive diseases contg. the same, process for the prodn. thereof and prepns. assocd. therewith)

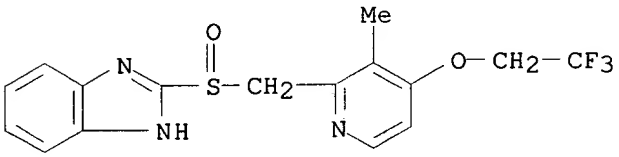
RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



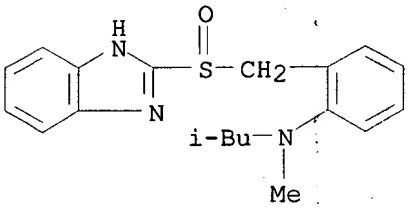
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 104340-86-5 HCAPLUS
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:56054 HCAPLUS
DOCUMENT NUMBER: 128:145387
TITLE: Combined use of pyridine derivatives as Helicobacter pylori **inhibitors**, **proton pump inhibitors**, and antibiotics or protozoacides
INVENTOR(S): Hirayama, Fumihiro; Yokoyama, Yoshito; Ikeda, Takashi; Sano, Mitsuharu; Katakita, Takeshi
PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10017471	A2	19980120	JP 1996-175245	19960704

OTHER SOURCE(S): MARPAT 128:145387

AB (A) pyridine derivs. I [R1 = H, halo, alkyl, alkoxy, OH, alkoxycarbonyl, CO2H, haloalkyl, NO2, NH2, mono- or dialkylamino, alkoxycarbonylalkylamino, carboxyalkylamino; R2-3 = H, halo, alkyl; P:Q = CH:CH, N:CH, CH:N; A = O, S, NR4 (R4 = H, alkyl, alkoxycarbonyl, hydroxyalkyl, alkoxyalkyl, acyloxyalkyl, alkoxycarbonylalkyl, carboxyalkyl, carbamoyl, carbamoylalkyl, mono- or dialkylcarbamoyl, mono- or dialkylcarbamoylalkyl, thiocarbamoyl, mono- or dialkylthiocarbamoyl); n = 0-2; B = S(O)p (p = 0-2); D = direct bond, (un)substituted alkylene, oxoalkylene, (LO)q (q = CH2CH2, CH:CH; q = 1-1000; if L = CH:CH, then q = 1); E = H, alkyl, alkoxyalkyl, NR6R7 [R6-7 = H, alkyl, cycloalkyl, acyl, (un)substituted Ph, (un)substituted phenylalkyl, (un)substituted heteroarylalkyl; NR6R7 may be condensed heterocycle], N-heterocycle Q [R8 = H, alkyl, acyl, carboxyalkyl, (un)substituted phenylalkyl; Y = CH2, O, S; l, m = 0-3]; if D = (LO)q, then E = H, alkyl] or their pharmaceutically acceptable salts are used in combination with (B) proton pump inhibitors, and (C) antibiotics or protozoacides for eradication of H. pylori, treatment of ulcer, and prevention of recurrence. A combination of omeprazole tablet, amoxicillin capsule, and capsule of 2-[3-methyl-4-(2-morpholinoethylthio)-2-pyridylmethylthio]-1H-benzimidazole trihydrochloride is exemplified.

IC ICM A61K031-44
ICS A61K031-44; A61K031-445; A61K031-475; A61K031-495; A61K031-535; C07D401-12; C07D401-14; C07D413-12; C07D413-14; C07D417-12; C07D498-04; C07D513-04

CC **63-6** (Pharmaceuticals)
Section cross-reference(s): 1

ST pyridine Helicobacter **inhibitor** combination **antiulcer** agent; **proton pump inhibitor** Helicobacter bactericide pyridine; antibiotic combination Helicobacter **inhibitor** pyridine; protozoacide combination Helicobacter **inhibitor** pyridine

IT Antibacterial agents
Antiulcer agents
Helicobacter pylori
Protozoacides
(combined use of pyridine derivs. as Helicobacter pylori **inhibitors, proton pump inhibitors**, and antibiotics or protozoacides)

IT Antibiotics
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined use of pyridine derivs. as Helicobacter pylori **inhibitors, proton pump inhibitors**, and antibiotics or protozoacides)

IT **201988-51-4 201988-53-6**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined use of pyridine derivs. as Helicobacter pylori **inhibitors, proton pump inhibitors**, and antibiotics or protozoacides)

IT **201988-51-4 201988-53-6**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined use of pyridine derivs. as Helicobacter pylori **inhibitors, proton pump inhibitors**, and antibiotics or protozoacides)

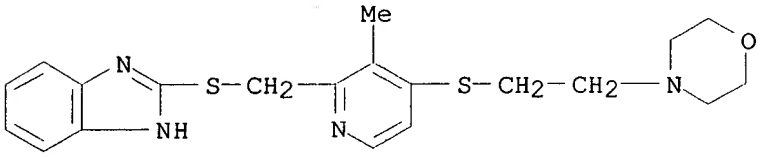
RN 201988-51-4 HCAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[amino(4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2.alpha.,5.alpha.,6.beta.(S*)]]-, mixt. with 5-methoxy-2-[[(4-methoxy-3,5-

dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole and 2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]-1H-benzimidazole trihydrochloride (9CI) (CA INDEX NAME)

CM 1

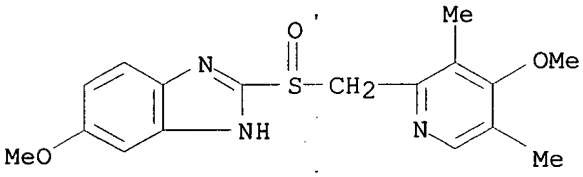
CRN 201988-50-3
CMF C20 H24 N4 O S2 . 3 Cl H



● 3 HCl

CM 2

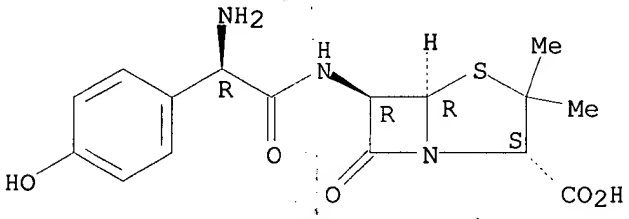
CRN 73590-58-6
CMF C17 H19 N3 O3 S



CM 3

CRN 26787-78-0
CMF C16 H19 N3 O5 S
CDES 1:2S2:2A,5A,6B(S*)

Absolute stereochemistry.

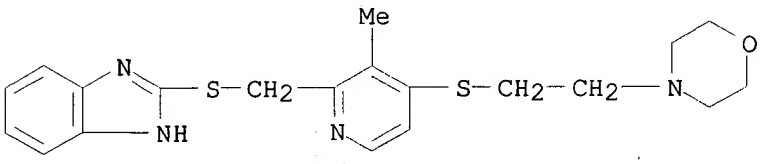


RN 201988-53-6 HCAPLUS
CN 1H-Imidazole-1-ethanol, 2-methyl-5-nitro-, mixt. with 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole and 2-[[[3-methyl-4-[[2-(4-morpholinyl)ethyl]thio]-2-pyridinyl]methyl]thio]-1H-

benzimidazole trihydrochloride (9CI) (CA INDEX NAME)

CM 1

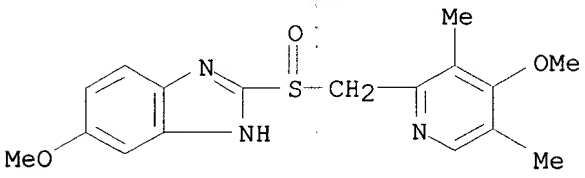
CRN 201988-50-3
CMF C20 H24 N4 O S2 . 3 Cl H



●3 HCl

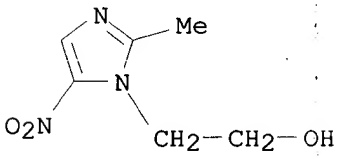
CM 2

CRN 73590-58-6
CMF C17 H19 N3 O3 S



CM 3

CRN 443-48-1
CMF C6 H9 N3 O3



L43 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:605523 HCAPLUS
DOCUMENT NUMBER: 125:230851
TITLE: Concomitant administration of bismuth compounds and antibacterials for treatment of Helicobacter pylori infections
INVENTOR(S): Athanikar, Narayan Krishnarao
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9624341	A1	19960815	WO 1995-US15985	19951208
W: AU, CA, CN, CZ, HU, KR, MX, NZ, PL, RU, SK				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9645967	A1	19960827	AU 1996-45967	19951208
ZA 9600099	A	19970708	ZA 1996-99	19960108

PRIORITY APPLN. INFO.: US 1995-385060 A 19950207
US 1995-518971 A 19950824
WO 1995-US15985 W 19951208

AB The invention relates to concomitant treatment with Bi compds. and antibiotics in oral and peroral dosage forms to eradicate H. pylori from its niches both in the dental plaque and in the gastric mucosa to improve the ulcer cure rate and prevent ulcer relapse. The invention also provides for treatment with bismuth compds., and antibiotics which are effective against Campylobacter rectus and Treponema denticola which are responsible for causing halitosis. The invention also provides bismuth compds. which have applications in wound healing, particularly in ocular and dermal wound healing. A chewing gum contg. colloidal Bi substrate is formulated.

IC ICM A61K009-68
ICS A61K006-00

CC **63-6** (Pharmaceuticals)
Section cross-reference(s): 1

IT Sanguinaria
(antibiotics from; concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT Antibiotics
Campylobacter pyloridis
Campylobacter rectus
Dentifrices
Mouthwashes
Treponema denticola
Wound healing
(concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lanthocins; concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT **Ulcer inhibitors**
(**proton-pump inhibitors**; concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT Dentifrices
(chewing gums, concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT Mouth
(disease, halitosis, concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT Pharmaceutical dosage forms
(lozenges, concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

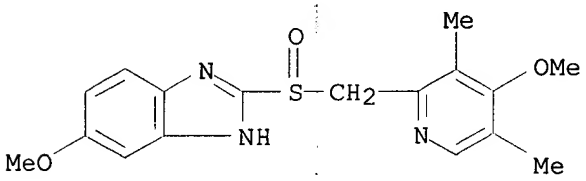
IT Pharmaceutical dosage forms

(tablets, chewable, concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

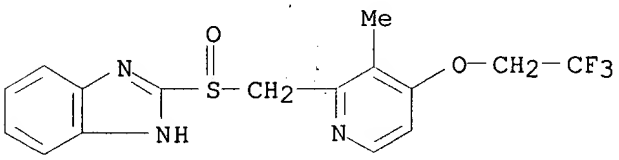
IT 60-54-8, Tetracycline 69-53-4, Ampicillin 26787-78-0, Amoxicillin 57644-54-9, Bismuth subcitrate **73590-58-6**, Omeprazole **103577-45-3**, Lansoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

IT **73590-58-6**, Omeprazole **103577-45-3**, Lansoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(concomitant administration of bismuth compd. and antibacterials for treatment of **ulcer** and dental plaques)

RN 73590-58-6 HCAPLUS
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L43 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:386189 HCAPLUS
DOCUMENT NUMBER: 125:41860
TITLE: An **antiulcer** medicine comprising a protein possessing cell growth factor activity and a **proton pump inhibitor**
INVENTOR(S): Satoh, Hiroshi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9607421	A2	19960314	WO 1995-JP1772	19950906
WO 9607421	A3	19960411		

W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG,

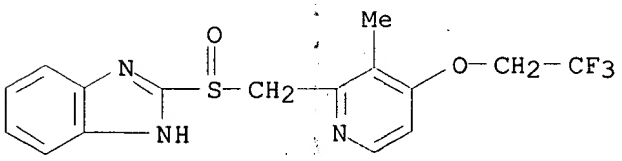
SI, SK, TJ, TM, TT, UA, US, UZ, VN
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

JP 08127540	A2	19960521	JP 1995-228028	19950905
AU 9533991	A1	19960327	AU 1995-33991	19950906
PRIORITY APPLN. INFO.:			JP 1994-215717	19940909
			WO 1995-JP1772	19950906

OTHER SOURCE(S): MARPAT 125:41860

AB The present invention relates to a medicine which comprises a combination of a protein possessing cell growth factor activity with a proton pump inhibitor which enhances the preventive and therapeutic effect of ulcers, particularly peptic ulcers. For example, a capsule contained lansoprazole 10, CS23 (bFGF mutein) 0.1, lactose 90, microcryst. cellulose 70, and Mg stearate 10 mg.

IC ICM A61K038-18
ICI A61K038-18, A61K031-44
CC **63-6** (Pharmaceuticals)
Section cross-reference(s): 1
ST **antiulcer** bFGF mutein **proton pump inhibitor**; capsule lansoprazole CS23 **ulcer inhibitor**
IT **Ulcer inhibitors**
(**antiulcer** medicine contg. protein possessing cell growth factor activity and **proton pump inhibitor**
)
IT Pharmaceutical dosage forms
(capsules, **antiulcer** medicine contg. protein possessing cell growth factor activity and **proton pump inhibitor**)
IT Pharmaceutical dosage forms
(tablets, **antiulcer** medicine contg. protein possessing cell growth factor activity and **proton pump inhibitor**)
IT **103577-45-3**, Lansoprazole 106096-93-9, Basic fibroblast growth factor 120946-18-1, CS 23
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antiulcer** medicine contg. protein possessing cell growth factor activity and **proton pump inhibitor**
)
IT **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**antiulcer** medicine contg. protein possessing cell growth factor activity and **proton pump inhibitor**
)
RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L43 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:470389 HCAPLUS
DOCUMENT NUMBER: 122:222897
TITLE: Formulations comprising antibacterial substances and **antiulcer** substances
INVENTOR(S): Akiyama, Yohko; Nakao, Masafumi; Nagahara, Naoki; Iwasa, Susumu
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 642797	A1	19950315	EP 1994-306351	19940830
EP 642797	B1	20000517		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
EP 995447	A1	20000426	EP 1999-203554	19940830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
AT 192932	E	20000615	AT 1994-306351	19940830
ES 2145102	T3	20000701	ES 1994-306351	19940830
CA 2131569	AA	19950310	CA 1994-2131569	19940907
JP 07126189	A2	19950516	JP 1994-213453	19940907
CN 1105855	A	19950802	CN 1994-109146	19940909
CN 1051922	B	20000503		
US 5948773	A	19990907	US 1997-863293	19970527
US 6319904	B1	20011120	US 1999-348313	19990707
US 2001027192	A1	20011004	US 2001-858655	20010517

PRIORITY APPLN. INFO.:
JP 1993-224707 A 19930909
EP 1994-306351 A3 19940830
US 1994-303674 B1 19940909
US 1997-863293 A3 19970527
US 1999-348313 A3 19990707

OTHER SOURCE(S): MARPAT 122:222897

AB The present invention includes a formulation which comprises an antibacterial substance and an antiulcer substance, wherein at least either of them is formulated into a gastrointestinal mucosa-adherent solid prepn. The formulation shows a long retention time in the gastrointestinal tract because of adhesion to the gastrointestinal tract mucosa, synergetically enhances the pharmaceutical effects of an antibacterial substance, esp. an antibiotic against Helicobacter pylori (HP) and an antiulcer substance, with very low doses of active ingredients, particularly the anti-HP antibiotic with low prevalence of side effects. For example, 2-[2-[3-methyl-4-(2,2,3,3-tetrafluoropropoxy)pyridyl]methylthio]benzimidazole 15, amoxicillin 5, behenic acid polyglyceride (HB-310) 65, and poly(acrylic acid) 15g were mixed and granulated.

IC ICM A61K045-06
ICS A61K047-14; A61K047-32; A61K047-36; A61K031-43; A61K031-44; A61K009-00
CC **63-6** (Pharmaceuticals)
ST **antiulcer** antibiotic combination mucosa adherent matrix; benzimidazole amoxicillin polyglyceride **antiulcer** oral prepn
IT Antibiotics
Campylobacter pyloridis
Ulcer inhibitors

(mucosa-adherent **antiulcer** prepns. contg. antibiotics and **proton pump inhibitors**)

IT Pharmaceutical dosage forms
(capsules, mucosa-adherent **antiulcer** prepns. contg. antibiotics and **proton pump inhibitors**)

IT Pharmaceutical dosage forms
(granules, mucosa-adherent **antiulcer** prepns. contg. antibiotics and **proton pump inhibitors**)

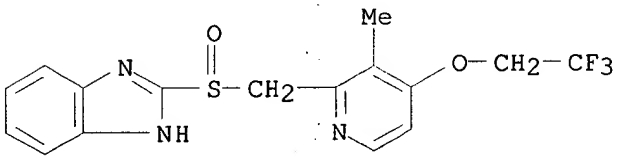
IT Pharmaceutical dosage forms
(solids, oral, mucosa-adherent **antiulcer** prepns. contg. antibiotics and **proton pump inhibitors**)

IT 57-92-1, Streptomycin, biological studies 60-54-8, Tetracycline 61-33-6, Benzylpenicillin, biological studies 114-07-8, Erythromycin 1406-05-9, Penicillin 9003-01-4, Poly(acrylic acid) 25618-55-7D, Polyglycerin, fatty acid esters 26787-78-0, Amoxicillin 32887-01-7, Mecillinam 61477-96-1, Piperacillin 64221-86-9, Imipenem 64366-79-6 **103577-45-3**, Lansoprazole 103577-82-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucosa-adherent **antiulcer** prepns. contg. antibiotics and **proton pump inhibitors**)

IT **103577-45-3**, Lansoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucosa-adherent **antiulcer** prepns. contg. antibiotics and **proton pump inhibitors**)

RN 103577-45-3 HCAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



L43 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:294419 HCAPLUS
DOCUMENT NUMBER: 122:64400
TITLE: Veterinary composition containing a **proton pump inhibitor**
INVENTOR(S): Olovson, Stig-Goeran Arthur; Pilbrant, Aake Gunnar
PATENT ASSIGNEE(S): Astra AB, Swed.
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9425070	A1	19941110	WO 1994-SE368	19940426

W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

IL 109245	A1	20000716	IL 1994-109245	19940407	
LT 3263	B	19950525	LT 1994-1920	19940422	
CA 2161683	AA	19941110	CA 1994-2161683	19940426	
AU 9466938	A1	19941121	AU 1994-66938	19940426	
AU 678830	B2	19970612			
EP 696921	A1	19960221	EP 1994-914665	19940426	
EP 696921	B1	20010207			
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BR 9406363	A	19960227	BR 1994-6363	19940426	
CN 1122109	A	19960508	CN 1994-191967	19940426	
JP 08509493	T2	19961008	JP 1994-524159	19940426	
HU 74868	A2	19970228	HU 1995-3085	19940426	
RU 2131267	C1	19990610	RU 1995-122630	19940426	
CZ 285191	B6	19990616	CZ 1995-2825	19940426	
PL 176755	B1	19990730	PL 1994-311276	19940426	
SK 280465	B6	20000214	SK 1995-1354	19940426	
AT 199060	E	20010215	AT 1994-914665	19940426	
ES 2155473	T3	20010516	ES 1994-914665	19940426	
US 5731002	A	19980324	US 1994-235258	19940429	
NO 9504240	A	19951023	NO 1995-4240	19951023	
FI 9505124	A	19951027	FI 1995-5124	19951027	
PRIORITY APPLN. INFO.:			SE 1993-1489	A	19930430
			WO 1994-SE368	W	19940426

AB A stable, oral pharmaceutical compn. comprising a proton pump inhibitor and a gelling agent designed for the treatment of gastric acid related diseases in animals. E.g., omeprazole enteric-coated pellets were prepd.

IC ICM A61K047-36
ICS A61K009-30; A61K031-44

CC **63-6** (Pharmaceuticals)

ST **proton pump inhibitor** veterinary compn

IT Stomach
(acid, disease; veterinary compn. contg. a **proton pump inhibitor**)

IT **Ulcer**
(veterinary compn. contg. a **proton pump inhibitor**)

IT Pharmaceutical dosage forms
(tablets, veterinary compn. contg. a **proton pump inhibitor**)

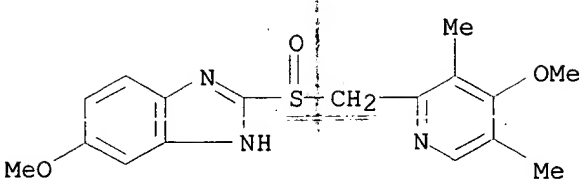
IT 12408-02-5, Hydrogen ion, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(veterinary compn. contg. a **proton pump inhibitor**)

IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(veterinary compn. contg. a **proton pump inhibitor**)

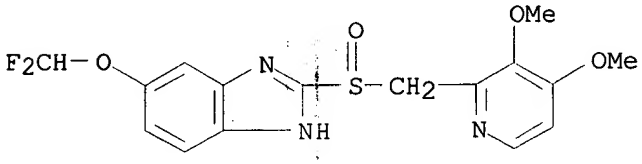
IT **73590-58-6**, Omeprazole **102625-70-7**, Pantoprazole **103577-45-3**, Lansoprazole **104340-86-5**, Leminoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(veterinary compn. contg. a **proton pump inhibitor**)

RN 73590-58-6 HCAPLUS

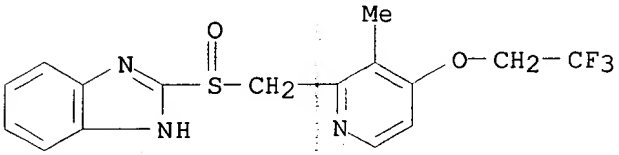
CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



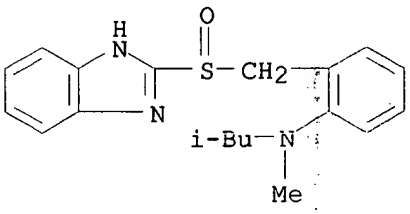
RN 102625-70-7 HCAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 103577-45-3 HCAPLUS
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)



RN 104340-86-5 HCAPLUS
CN Benzenamine, 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methyl-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)



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FILE LAST UPDATED: 13 MAR 2002              <20020313/UP>
MOST RECENT DERWENT UPDATE            200217   <200217/DW>
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         http://www.derwent.com/chemistryresource/index.html <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,
    SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<

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L3             6 S ACIDEX OR ANTRA OR AUDAXOL OR AULCER OR BELMAZOL OR CEPRANDAL
                 E INDURGAN OR INHIBITRON OR INHIPUMP OR LOGASTRIC OR LOMAC OR L
L4             7 S INDURGAN OR INHIBITRON OR INHIPUMP OR LOGASTRIC OR LOMAC OR L
L5           161 S OMEPRAL OROMEPRAZOLE OR OMPRAZON OR OMEPRIL OR OMEZOL OR OMEZ
L6           504 S L1-L5
L7           732 S L6 OR OMEPRAZOLE
L8           352 S OMEPRAZOLE OR LANSOPRAZOLE OR PANTOPRAZOLE OR E 3810 OR LEMIN
L9           734 S L7 OR L8
L10        14886 S ULCER? OR ANTIULCER?
L11          179 S L10 AND L9
L12          197 S PROTON PUMP (4A) INHIBIT?
L13 (      48807)S O2 OR OXYGEN COMSUMP?
L14        49365 S O2 OR OXYGEN CONSUMP?
L15            1 S PHYSIL? (4A) PERFORM?
L16        22182 S FATIGUE?
L17          102 S PHYSIOL? (4A) PERFORM?
L18        71563 S L14-L17
L19           56 S L11 AND L12
L20            0 S L19 AND L18
L21            0 S L11 AND L18
                 E WO2001091748/PN
L22            1 S E3
L23          117 S L12 AND L10
L24            3 S L23 AND L18
L25        25822 S PHYSIOL?
L26            1 S L11 AND L25
L27         3302 S DRUG DELIVER?
L28            1 S L27 AND L11
L29            0 S L23 AND L27
L30            5 S L24 OR L22 OR L26 OR L28
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                OMEPRIL OR OMEZOL OR OMEZZOL OR OMID OR OMISEC OR OMIZAC OR
                OMP OR OMPANYT OR OMZ OR OPRAX OR OPRAZ OR OZOKEN
L6          504 SEA FILE=WPIDS ABB=ON  (L1 OR L2 OR L3 OR L4 OR L5)
L7          732 SEA FILE=WPIDS ABB=ON  L6 OR OMEPRAZOLE
L8          352 SEA FILE=WPIDS ABB=ON  OMEPRAZOLE OR LANSOPRAZOLE OR PANTOPRAZO
                LE OR E 3810 OR LEMINOPRAZOLE OR S 4216
L9          734 SEA FILE=WPIDS ABB=ON  L7 OR L8
L10       14886 SEA FILE=WPIDS ABB=ON  ULCER? OR ANTIULCER?
L11         179 SEA FILE=WPIDS ABB=ON  L10 AND L9
L12         197 SEA FILE=WPIDS ABB=ON  PROTON PUMP (4A) INHIBIT?
L14       49365 SEA FILE=WPIDS ABB=ON  O2 OR OXYGEN CONSUMP?
L15           1 SEA FILE=WPIDS ABB=ON  PHYSIL? (4A) PERFORM?
L16       22182 SEA FILE=WPIDS ABB=ON  FATIGUE?
L17         102 SEA FILE=WPIDS ABB=ON  PHYSIOL? (4A) PERFORM?
L18       71563 SEA FILE=WPIDS ABB=ON  (L14 OR L15 OR L16 OR L17)
L22           1 SEA FILE=WPIDS ABB=ON  WO2001091748/PN
L23         117 SEA FILE=WPIDS ABB=ON  L12 AND L10
L24           3 SEA FILE=WPIDS ABB=ON  L23 AND L18
L25       25822 SEA FILE=WPIDS ABB=ON  PHYSIOL?
L26           1 SEA FILE=WPIDS ABB=ON  L11 AND L25
L27        3302 SEA FILE=WPIDS ABB=ON  DRUG DELIVER?
L28           1 SEA FILE=WPIDS ABB=ON  L27 AND L11
L30           5 SEA FILE=WPIDS ABB=ON  L24 OR L22 OR L26 OR L28


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L30  ANSWER 1 OF 5  WPIDS COPYRIGHT 2002   DERWENT INFORMATION LTD
AN   2002-097731 [13]   WPIDS
DNC  C2002-030480
TI   Use of a proton pump inhibitor in a
     formulation for the prevention of gastrointestinal ulcers.
DC   B04 B05 C06
IN   PIPERS, F
PA   (MERI-N) MERIAL LTD
CYC  95
PI   WO 2001091748 A2 20011206 (200213)* EN   17p <--
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TR TZ UG ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
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KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
ADT WO 2001091748 A2 WO 2001-EP5788 20010518
PRAI US 2000-207878P 20000530
AB WO 200191748 A UPAB: 20020226
NOVELTY - Preparation of a formulation for the prevention of gastric **ulcers** in a mammal involves the use of a **proton pump inhibitor**.
ACTIVITY - **Antiulcer**; Antiinflammatory.
MECHANISM OF ACTION - **Proton pump inhibitor**.
USE - In the treatment of gastric **ulcers** such as gastrointestinal **ulcers** in mammal such as a horse, dog or human (claimed).
ADVANTAGE - The method improves physiological responses in mammal such as horses, e.g. **oxygen consumption** and time to **fatigue**.
Dwg.0/0

L30 ANSWER 2 OF 5 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 2001-420606 [45] WPIDS
DNC C2001-127343
TI Agent for preventing and treating stomach gastritis or duodenal **ulcer**, comprises aggregated active factor with respect to Helicobacter genus, and acid secretion inhibitor.
DC B05
PA (IYAK-N) IYAKUHIN FUKUSAYO HIGAI KYUSAI KENKYU SH; (KOKU-N) KOKURITSU GAN CENT SOCHO; (TAIC) TAIYO KAGAKU KK
CYC 1
PI JP 2001081049 A 20010327 (200145)* 4p
ADT JP 2001081049 A JP 1999-258375 19990913
PRAI JP 1999-258375 19990913
AB JP2001081049 A UPAB: 20010813
NOVELTY - An agent for preventing and treating stomach gastritis or duodenal **ulcer**, comprises an aggregated active factor with respect to Helicobacter genus, and an acid section inhibitor.
ACTIVITY - Antimicrobial; **antiulcer**. 7 week-old male Mongolian gerbils were treated with Helicobacter pylori antibody obtained according to Journal of Gastroenterology, 31(5), 755 (1996). The infected animals were divided into 5 groups. Group 1 was treated with **physiological** saline, group 2 with IgY, group 3 with proton pump inhibitor, group 4 with 2 mg/10 g body weight of anti-pylori microbe IgY and 20 micro g/10 g body weight of proton pump, and group 5 with sugar. The treated animals were decapitated, their stomachs were opened and positive number of surviving microbes were counted by CLO-test. Group 4 showed the lowest number of surviving microbes when compared to other the groups, hence the agent was effective in preventing and treating duodenal **ulcer** and stomach gastritis.
MECHANISM OF ACTION - H2 receptor inhibitor; proton pump inhibitor (claimed). No test details are given for above mentioned mechanism of actions.
USE - For treating and preventing stomach gastritis or duodenal **ulcer** caused by Helicobacter (claimed).
ADVANTAGE - The agent formulated as tablet, capsule or as powder effectively eliminates microbes causing duodenal **ulcer** and stomach gastritis, without any side effects.
Dwg.0/0

L30 ANSWER 3 OF 5 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 1999-204378 [17] WPIDS

DNC C1999-059450
TI Controlling gram negative infections e.g. H.pylori infection and resultant **ulcer** or other gastrointestinal disorder - comprises administering polyether ionophore antibiotic e.g. monensin.
DC B03
IN BERKOWITZ, B; BLACKBURN, C; SACHS, G
PA (MILL-N) MILLENNIUM PHARM INC
CYC 22
PI WO 9907361 A1 19990218 (199917)* EN 66p
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA JP
AU 9887701 A 19990301 (199928)
US 6017950 A 20000125 (200012)
US 6271256 B1 20010807 (200147)
US 2001044463 A1 20011122 (200176)
ADT WO 9907361 A1 WO 1998-US16299 19980805; AU 9887701 A AU 1998-87701 19980805; US 6017950 A US 1997-905985 19970805; US 6271256 B1 Div ex US 1997-905985 19970805, US 1999-451622 19991130; US 2001044463 A1 Div ex US 1997-905985 19970805, Div ex US 1999-451622 19991130, US 2001-865160 20010524
FDT AU 9887701 A Based on WO 9907361; US 6271256 B1 Div ex US 6017950; US 2001044463 A1 Div ex US 6017950, Div ex US 6271256
PRAI US 1997-905985 19970805; US 1999-451622 19991130; US 2001-865160 20010524
AB WO 9907361 A UPAB: 19990503
NOVELTY - Controlling gram negative infections e.g. Helicobacter pylori infections, in mammals comprises administration of a polyether ionophore related to monensin.

DETAILED DESCRIPTION - Method for controlling gram negative bacteria in a mammal, comprises administration of a heterocyclyl substituted bicyclic spiroether compound in which both rings are 3-20C, preferably 4-7C, optionally in combination with a **proton pump inhibitor**, an acid agonist or blocker, and/or bismuth salt, is new.

USE - The disorders treated are those resulting from infections by gram negative bacterial infection, particularly H. pylori, normally associated with the gastrointestinal (GI) tract. The method does not apply to gram negative bacteria found normally as GI flora, e.g. E. coli, and not causing infections. The disorders include particularly inflammation and **ulcers**. Other disorders resulting from infections are gastritis, non-**ulcer** dyspepsia, esophageal reflux, typhus, food poisoning, bacillary dysentery and pneumonia, and cholera; non-GI conditions include acne rosacea, ''Gulf veterans' syndrome'', chronic **fatigue**, and halitosis. (I) are also used for treating animals, including cattle, sheep, pigs, horses, dogs, cats, rats, and mice.

ADVANTAGE - Many prior art treatments may not be effective in vivo, due to bacterial resistance, poor bioavailability, lack of selectivity for H. pylori, and patient non-compliance.
Dwg.0/0

L30 ANSWER 4 OF 5 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 1998-286570 [25] WPIDS
DNC C1998-088716
TI Delayed release **drug delivery** system for **omeprazole** and acid sensitive drugs - comprises basic alkaline core, multiple layers of drug separated by moisture barriers and enteric layer.
DC A96 B07
IN SHARMA, V K
PA (SHAR-N) SHARMATEK INC

CYC 26
PI WO 9819668 A1 19980514 (199825)* EN 29p
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU ID JP KR NO NZ US
AU 9851798 A 19980529 (199841)
NO 9902186 A 19990505 (199933)
ZA 9709937 A 19990728 (199935) 26p
EP 941074 A1 19990915 (199942) EN
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
ADT WO 9819668 A1 WO 1997-US20851 19971105; AU 9851798 A AU 1998-51798 19971105; NO 9902186 A WO 1997-US20851 19971105, NO 1999-2186 19990505; ZA 9709937 A ZA 1997-9937 19971105; EP 941074 A1 EP 1997-946676 19971105, WO 1997-US20851 19971105
FDT AU 9851798 A Based on WO 9819668; EP 941074 A1 Based on WO 9819668
PRAI US 1996-740981 19961106
AB WO 9819668 A UPAB: 19980624
Delayed release **drug delivery** system comprises pellets comprising a core of a basic alkaline material, a coating of **omeprazole** surrounding the basic alkaline core and an enteric membrane. The system has layers of **omeprazole** are separated by non-enteric moisture barriers surrounding the **omeprazole** layers and at least 1 enteric layer comprising an enteric film former plasticised with a water soluble plasticiser. The enteric membranes have a weight gain sufficient to permit release of **omeprazole** after immersion in both 0.1N HCl for 2 hours for enteric behaviour, followed by pH 6.8 buffer, the release corresponding to a drug release pattern of 0% of the total **omeprazole** released after at least 1.5 hours of measurement in 0.1N HCl and from 60-80% of the total **omeprazole** released after 45 minutes of measurement in the pH6.8 buffer.

The basic alkaline core preferably comprises a basic alkaline material and a spheronising structuring agent. The basic alkaline material comprises salts of strong basic cations and weak acidic anions, metal oxides, organic buffers, natural clays or sodium borate. The ratio of **omeprazole** to alkaline material is 1:1- 1:5 and the ratio of alkaline material to spheronising /disintegrating agent is 2:1-1:2. The pellets comprise at least 3 distinct drug layers of **omeprazole** separated by moisture barrier layers which comprise water insoluble semipermeable polymeric membranes, preferably a cellulose-based resin. The delayed release enteric barrier comprises an enteric film former plasticised with a water soluble plasticiser and is preferably a cellulose-based polymer or an acrylic resin. The plasticiser comprises a triacetin, triethyl citrate or propylene glycol. The ratio of polymer to plasticiser is 9:1-7:3.

USE - **Omeprazole** has inhibitory action against the secretion of gastric juices and can be used in the treatment of gastric and duodenal **ulcers**. The delayed release delivery system for **omeprazole** allows site specific delivery and pulsatile (bolus) kinetics for once-a -day dosage. The delivery system can be used to deliver acid sensitive drugs or biologically active materials e.g. vitamins, vaccines, antibiotics, antifungal agents, muscle relaxers and mood altering drugs.
Dwg.1/5

L30 ANSWER 5 OF 5 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
AN 1997-021672 [02] WPIDS
CR 1996-506074 [50]; 1996-506079 [50]; 1996-506082 [50]; 1997-021670 [49]; 1997-021671 [49]
DNC C1997-007027
TI gem-Diol ester(s) of polyunsaturated fatty acids e.g. gamma linolenic acid - for pharmaceutical, food and cosmetic use.

DC B04 B05 C03 D13 D21
IN HORROBIN, D F; KNOWLES, P; MANKU, M; MCMORDIE, A; PITT, A; REDDEN, P
PA (SCOT-N) SCOTIA HOLDINGS PLC
CYC 1
PI ZA 9603433 A 19961030 (199702)* EN 41p
ADT ZA 9603433 A ZA 1996 3433 19960430
PRAI GB 1995-8823 19950501
AB ZA 9603433 A UPAB: 19970212
gem-Diol esters of formula R1O-CHR3-OR2 (I) are new. R1 = acyl gp. derived from a 16-30C fatty acid contg. two or more cis or trans double bonds, partic. an n-6 or n-3 series essential fatty acid or conjugated linoleic acid (cLA) or columbinic acid (CA) or parinaric acid; R2 = R1 or any other nutrient, drug or bioactive residue; R3 = H or hydrocarbyl opt. contg. heteroatoms, pref. alkyl, partic. 1-4C alkyl.

USE - (I) where R1 = acyl derived from gamma linolenic acid (GLA) or dihomo gamma linolenic acid (DGLA) and R2 = acyl derived from GLA, DGLA, stearidonic acid (SA), eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), cLA or CA are useful as food components, nutritional supplements, food additives, components of clinical nutrition prods. for enteral or parenteral admin. and cosmetic components, esp. for treating (a) complications of diabetes, esp. neuropathy and retinopathy; and improvement of responses to insulin in diabetes and pre-diabetes; (b) cancers; (c) osteoarthritis; (d) rheumatoid arthritis; (e) other inflammatory and auto-immune diseases e.g. Sjogren's syndrome, systemic lupus, **ulcerative** colitis, Crohn' s disease and uveitis; (f) respiratory diseases e.g. asthma; (g) neurological disorders e.g. multiple sclerosis, Parkinson's disease and Huntington' s chorea; (h) renal and urinary tract disorders; (i) cardiovascular disorders; (j) degenerative diseases of the eye e.g. retinitis pigmentosa and senile macular degeneration; (k) psychiatric disorders including schizophrenia, Alzheimer's disease, attention deficit disorder, alcoholism and depression; (l) prostatic hypertrophy and prostatitis; (m) impotence and male infertility; (n) mastalgia; (o) male pattern baldness; (p) osteoporosis; (q) dermatological and allergic disorders; (r) dyslexia and other learning disabilities; and (s) cancer cachexia. (I) where R1 = acyl derived from GLA, DGLA, arachidonic acid (AA), SA, cLA, EPA or DHA and R2 = one of the following agents are useful for treating any disease esp. the following disorders, and other uses mentioned: (a) tryptophan for psychiatric, neurological, behavioural, pain and other disorders and esp. depression, sleep and migraine; (b) phenylalanine for depression, multiple sclerosis and chronic **fatigue** syndrome; (c) arginine for diseases in which the production of nitric oxide is defective; (d) carnitine or carnitine derivs. for muscle weakness, cardiac failure, chronic **fatigue** syndrome, Alzheimer's disease, and peripheral neuropathies; (e) any other amino acid or related substance or aminolevulinic acid or deriv. thereof for cancers; (f) adenylosuccinate or related substances for muscular dystrophy , cardiac failure, chronic **fatigue** and Alzheimer' s disease and other dementias; (g) aspirin, salicylic acid, indomethacin, ibuprofen, or any other non-steroidal anti-inflammatory drug for inflammatory disorders or pain, of Alzheimer's disease and other dementias and of any disease in which platelet aggregation should be inhibited; (h) any antibiotic for the treatment of any appropriate infectious disease but esp. tetracycline, clindamycin, minocycline, chlortetracycline and erythromycin for the treatment of acne; (i) any antimalarial or anti-protozoal drug esp. chloroquine, mepacrine, quinacrine and mefloquine for the treatment of malaria, protozoal disorders, inflammatory disorders and schizophrenia; (j) any antifungal drug esp. metronidazole and antifungal imidazoles and nitroimidazoles and amphotericin for the treatment of fungal infections of various types; (k) any anti-inflammatory steroid esp. hydrocortisone and betamethasone for

the treatment of skin disorders and beclomethasone and budesonide for the treatment of asthma; (l) any gonadal steroid esp. oestrogens and progestogens for the treatment of ovarian deficiency and osteoporosis and androgens for the treatment of testicular deficiency; (m) any adrenal steroid esp. dehydroepiandrosterone for the treatment of disorders associated with ageing; (n) any retinoid esp. tretinoin and isotretinoin for the treatment of dermatological disorders and for use in skin care ; (o) any anticancer agent for the treatment of cancer; (p) any antipsychotic agent for the treatment of schizophrenia and other psychoses; (q) any antidepressive agent for the treatment of depression; (r) any anti-anxiety agent esp. for the treatment of anxiety and panic attacks; (s) any immunosuppressive agent esp. cyclosporine and tacrolimus for the control of immunity after organ transplantation and for the treatment of autoimmune and inflammatory disorders including psoriasis, eczema, asthma, rheumatoid arthritis and inflammatory bowel disease; (t) any **proton pump inhibitor** or H2 antagonist
esp. diseases associated with excess gastric acid production or reduced defences against gastric acidity; (u) any diuretic to treat fluid retention and hypertension; (v) any calcium antagonist or angiotensin converting enzyme inhibitor or beta blocker to treat cardiovascular disease; (w) antiepileptic drug esp. phenytoin, carbamazepine or lamotrigine to treat epilepsy; (x) any hypolipidaemic agent esp. fibrates and statins for cholesterol lowering; (y) any oral hypoglycaemic for diabetes management; (z) any bisphosphonates for management of osteoporosis of Paget's disease; (aa) any contrast agents for radiology; (bb) any peptide or protein for treatment using these diseases.

ADVANTAGE - Transport through lipid membranes, e.g. of cells, of the skin or the blood-brain barrier, is enhanced.

Dwg.0/0